University Library Personnel in India

(Their Job-dimensions and Academic Needs)

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A

Presentation

To

My Daughter

Misha Pawan

CONTENTS

PROLOGUE

Having gone through the training to become a library and information scientist from an institution considered to be one of the best (the University of Delhi), whose founders are remembered with reverence, I was quite confident of becoming a good library and information scientist. With a stint in teaching science earlier, I was happy to work as a teacher in library and information science (LIS) in a comparatively not so old institution. I could feel the difference in contents and method of training new graduates between LIS and sciences. 'A lot more needs to be done' was the feeling I developed during this period.

Later, I opted for becoming a professional librarian in a university. Having worked for a few years, there was a fair chance to go into the operations and activities performed by professionals in a university library. The work in the library made me understand my weaknesses and those of LIS training that I had received and imparted. The course contents of LIS training needs revision. By doing so we can improve the situation.

The libraries (the term is used here to include other institutions with the function of providing information support for education and research) with the passage of time, have become complex systems. Specially during the last two decades, the factors like information explosion, availability and use of information and communication technology in libraries, greater enrolment of students and researchers, availability and accessibility of library networks in the country and large databases outside the country, availability of internet, financial constraints in the libraries, etc, have forced the libraries to change. The libraries are thus changing their operations and activities. Some are changing even their objectives. There is a marked change in the services offered and/or contemplated, and the way libraries are now managed than two decades earlier.

We are witnessing an intense activity' in information use as well as production. The concepts like information explosion, information society, etc. are by now well established in LIS literature. Excess of information has led to pressure on LIS personnel to make available to the users information after analysis, assessment and repackaging To man and manage the present complex,

open systems, that libraries are, the professionals do not appear to be confident. There is a stiff resistance and explicit uncertainity towards change among LIS personnel. Reorientation and training of LIS personnel appears to be continuously required to make them feel confident and to remove uncertainity about change.

The developments in the field of information and communication technology have revolutionised the very concept of information acquisition, storage, processing, retrieval, dissemination and other aspects of information management. In order to assimilate these changes and absorb them effectively in libraries, LIS personnel need to increase their competence and improve their skills. Continuing and flexible training programmes, in-service and short term term training programmes, etc can help LIS personnel to adapt themselves to these changes.

It was long before the country gained independence, that LIS education became available. Today there are more than 75 universities in India which offer LIS education, out of which more than 30 offer facilities for research programmes in the discipline. In addition to the universities there are other institutions which offer training programmes in LIS with non-traditional course contents, like Indian National Scientific Documentation Centre (INSDOC) at Delhi, or Documentation Research and Training Centre (DRTC), at Banglore. A question often has been asked 'Are the LIS training programmes need based ?' With my experience, and my views are echoed and shared by LIS professionals that I have met and worked with, the answer is 'no'. This opens up an area for detailed study.

We need to know the activities performed by LIS personnel in libraries, their educational needs, and their interest in undergoing further training. The library activities for which the LIS training has not equipped the personnel can be known. Areas of interest of LIS personnel for further training and the nature and duration of continuing education programmes which will interest the LIS professionals can be found. Precisely speaking this has been the objective of the present study.

As a result of this study I have found that nearly 90% of LIS personnel are interested in upgrading and updating their knowledge through training. According to different job-levels about 92% of administrators and 86% of non-administrators are interested in further training in LIS. Nearly half of the LIS personnel are interested in attending workshops/seminars, followed by 16% in regular courses, and 32% in shortterm courses Only 11% of them are not

interested in LIS training programmes

The study has revealed that 'library administration and management,' and 'library automation and information technology' are the major subject areas which will attract a large number of professionals, if the continuing education programmes are offered. This has been inferred on the basis of interest expressed by them and from their views about the formal LIS training they have received. The LIS personnel expect a variety of roles to be performed by LIS schools in addition to their traditional role of imparting education for specific degree programmes. The expected role of LIS schools also includes their role as a clearing house of information for the passed out graduates.

Having done this study, I feel that a number of studies on this subject should be conducted taking respondents from different types of libraries. Library managers and LIS faculty members should form the respondents for separate study so that their expectations from LIS personnel could be known. This would pave the way for objective assessment of the educational needs of LIS professionals and permit effective revision of course contents of regular LIS training programmes. An issue that needs investigaton is 'to what extent specialisation needs to be provided for' in training programmes. Boundaries of LIS as a discipline also need to be reconsidered before designing course contents.

7th January, 1998   Pawan K. Gupta

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GENSIS OF THE STUDY

The concept of information service in and for the society is very old Since ancient times the persons or groups with information have been powerful and respected. Even the persons with access to information commanded respect in the society In the monarchy, as well as in the other forms of the Governments, persons with qualities of scholarship were specially appointed to deal with information It was quite late that information dissemination media, as well as the persons connected with it, diversified The role of information collection, organisation, and dissemination came to be shared by a variety of persons - authors, journalists, editors, etc Later on within the complexities involved in the job, the librarians came to be associated with this work Gradually with the spread of education, libraries became partners in the progress in every sphere of life The library and information science (LIS) profession came into being with the development of its own theories and norms, the spread of LIS education, and LIS associations having taken lead to develop it as a profession [1]

Commenting on the dependence upon and importance of information for national development and decision making in all sectors, the National Policy on Library and Information System (India) (1986), has stated as its objectives, as follows

"Library and information sources are vital for all sectors of national activity The availability of information, expeditiously and pinpointedly, supports all decision making processes at all levels Relevant information accelerates the pace of national development An informed citizen is an asset to a democratic system of Government and the proper utilization of information can improve the quality of citizens The Government of India, therefore, realises the value of coordinating and upgrading the existing library and information

systems and services and initiating new programmes relevant to our national needs..."[2]

The statement very clearly defines the future growth and evolution of library and information systems and services in India. In fact there has been a consistent growth in this sector since independence.

Present Position of Libraries

India spread over 3.29 million square kilometers, has a population of 843.9 millions (1991 Census). The growth of institutions of higher education can be imagined by the comparison of number of educational institutions in the past some time. By the end of 1982-83 there were 133 universities and 5275 colleges in the country. Now there are more than 225 universities and 6000 colleges.

Various education commissions and committees on education, viz. University Education Commission (1948), Kothari Education Commission (1964), various University Grants Commission (UGC) committees, etc. all have emphasized the importance of libraries. All universities and colleges in the country, it is presumed, have libraries. Most of the universities have libraries with rich collections to support instruction and research though the services rendered by these need to be improved, as mainly they offer lending and photocopying services. CAS and SDI are not common and only a few in the past few years have taken steps towards use of modern information technology for creation of on-line catalogue and databases, etc. College libraries on the other hand are not so well developed in terms of services as well as collection.[3]

As per an All India Education Survey conducted by the NCERT, out of the total recognised schools at various stages of school education in India, 200,149 schools (82.06 per cent) are based in rural areas and remaining 44,847 (17.04 per cent) are in urban pockets. A little less than half i.e., 241,996 schools (41.08 per cent) have library facilities on record, but the actual number of schools which have some semblance of library is just 29.05 per cent. Yet another revealing factor is that 58.28 per cent urban schools are found to have library facilities as against 38.72 per cent rural schools. The stagewise figures of schools having library facilities are as follows :

Primary schools	1,47,699	32.41 per cent
Middle schools	54,052	59.61 per cent
Secondary schools	31,144	94.05 per cent

Senior secondary/	9,101	95 75 per cent
Intermediate/Junior/		
Pre-university		

It is rather alarming to note that as many as 67 59 per cent primary schools, 40 39 per cent middle schools, 5 95 per cent secondary schools, and 4 25 per cent senior secondary schools, junior and pre-university colleges lack library facilities of their own Even in schools which have library facility, the picture is not very rosy either In majority of the schools i e 93,279 (62 84 per cent) which are stated to have library, the number of books is less than 100 In as many as 128,519 schools (87 01 per cent) the number of books does not cross 250 mark The number of school libraries which have 1,000 volumes or more is just 2,788 "[4]

The Working Group of the Planning Commission (India) carried out a survey in 1984 in which it has observed as follows in the area of public libraries in India

"It is found that all the States and Union Territories in the country except Sikkim and Lakshadweep have set up state central libraries More than 360 districts out of a total of about 400 have district libraries It is estimated that 1,798 development blocks out of a total of 5,023 blocks (36 per cent) have block libraries, 41,828 villages out of a total of 5,75,937 (7 per cent) have village libraries and 1,280 towns out of 2,643 (48 per cent) have town libraries "[5] Till date only eight of the states have enacted library legislation, Among the Union territories only Delhi has a well developed public library system

In terms of services, the public libraries are not in a position to cater to the basic information needs of the society With old as well as poor collection, they mainly offer lending service Reference service, extension activities, etc are, 'with few exceptions', non existent Majority of these libraries are run by Government agencies or are aided financially by the Government Others are run by voluntary organisations, etc

In public libraries," on an average the expenditure has been about 50 paise per literate person or Rs 0 03 on per capita basis It is estimated that public libraries presently have 58 million volumes for a literate population of 253 million, or say 1 book for every four persons [and] one volume is added for every nine literate persons It is found that in actual terms only 15 per cent-20 per cent of the total literate population has an access to public library service '[6]

To work in libraries and information centres, and to develop a variety of LIS services, the LIS schools in the country have been under an ever increasing pressure to produce well trained manpower in sufficient quantity. It will be relevant to see the growth of LIS schools in the country during the past four decades briefly. Before independence, the provision for diploma course in library science was there in only six of the universities. Soon after independence, with the spread of education, research and development activities, industrialisation, along with extensive growth in publication, other mass media and communication activities, and of course the increase in population, there has been an extensive growth in the number of libraries and other information centres. All these factors have been responsible for the increase in number of LIS schools. These provide for different levels of education, varying from a certificate course to doctoral and post doctoral programmes. In 1992 there were 78 library schools engaged in providing LIS education leading to bachelor in LIS, 40 schools leading to master in LIS, 6 leading to M.Phil, and more than 30 schools with provision for research degrees leading to Ph.D., etc.[7] In addition we have educational programmes offered by Documentation Research and Training Centre (DRTC), Bangalore and Indian National Scientific Documentation Centre (INSDOC), Delhi which differ from the pattern of LIS education offered in various universities. These two offer courses with non-traditional course-contents, with greater emphasis on information science. For the last few years, we have bachelor and master level LIS programmes through distance education stream from a few universities, e.g. correspondence course from University of Madras, or programmes from open universities, like Indira Gandhi National Open University, Delhi.

The manpower produced by the various LIS schools during the past four decades has been chiefly responsible for developing the libraries in India, the libraries which are constantly under pressure to diversify their operations and services. Important factors resulting into increased pressure on libraries are :

1. Information conscious society, where information is now treated as a commodity, has been placing greater demand upon libraries. To quote Augustine (1986): "Already information has been accepted as strategic resource. It is a major factor that influences the overall efficiency and productivity in all sections of a nation's economy, like industry, agriculture, education and Governmental administration. Information is the major power. Today nations are classed into developed, developing

and under-developed based on the information production and consumpt on rates of each of them Developed countries have always a higher rate of information production and information consumption For a high level of information use what is needed is the development of a high level of information skill "[8]

2. There has been an exponential growth in the amount of information produced through out the world The development in science, technology and the socioeconomic development, etc. has followed, as well as generated, as a consequence of the phenomenal growth of the mass of documents and information

The growth in the sources of information has been the cause of increased pressure in handling of information by LIS personnel This has stimulated the production of a variety of sources of information, specially the secondary sources of information, consequently in turn changing the methods of consolidation and repackaging of information The pressure has been continuously increasing on LIS personnel to make available to the users the information after analysis, assessment and evaluation, i e in a form which can be readily assimilated and put to effective use in a minimum time As a result we find the conceptual changes and adaptation in the existing libraries and information centres, or even creation of new centres with change in objectives Information analysis centres, etc are with us as a result (Saracevic and Wood 1981) [9]

3. There have been continuous changes in the physical media carrying information, which have moved a long way from the traditional book or the serial in hard copy format To quote from the definition adopted in the draft of Rajasthan Public Library Bill (1991) —

" means any volume, part or division of a volume, pamphlet in any language, sheet of music, map chart or plan, and newspaper, periodical, be it printed or lithographed, or manuscript or microfilm or video/audio cassette or slide or disc or photograph or tape, machine readable formats and such other material "[10]

To this we may add other formats like tactile documents These directly affect the work of LIS personnel engaged in the acquisition, processing, storage, organisation, repackaging dissemination of information, etc

4. Development in modern information technology which is continuously

updating and differentiating itself, has provided a host of hardware and software to manipulate and transmit information along with powerful communication facilities, with great speed and accuracy, and reprographic facilities backed with high speed and fidelity, etc. This has changed the very concept of dealing with every aspect of information handling and communication. This has given rise to the concept of information management. As Tom Wilson (1989)[11] defines the information management, it is "the effective management of information resources (internal and external) of an organisation through proper application of information technology." The educational sector of LIS, as well as libraries, have been influenced by the techniques of information management with the use of information technology in past some time.

Libraries which originated as simple store houses of information, thus under the influence of continuous pressures, have changed from the traditional concept of a mere organisation, through the stage of a vibrant institution, to what we today see an ever changing and adapting to new developments, as a living being. The 'library' has proved the conceptualisation of Dr. S.R. Ranganathan, which he enunciated in his fifth law of library science - "A library is a growing organism". Like the growth of an organism, continuous variation and adaptation is implicit in the library. In the modern theory of systems, library is rightly classified as an 'open system' - living, reacting to stimuli, and responding to any change within as well as in its environment, where any such change is visualised to initiate a chain reaction in the system, compelling it to readjust in order to achieve a balanced state till the time a stimulus from a new change sets in the cycle once again.

The library is not only an 'open system', but because of its human component, it is a 'complex open system'. In such a dynamic state, the human component of the system has to continuously adapt itself to be relevant to the system and in order that system may achieve its objectives. This ever changing state of the library places varying demands on its human component, the librarians, which necessitate increased competence and skill. The pressure so generated in the library and consequent demand placed on librarians can be absorbed in many ways—by reorientation of library workers, continuing education programmes, or even by deputing key library workers/superiors to regular schools for improving their competence and their relevance to the library. The continuing education programmes offered by various sources, and the library schools in turn need to play their role by adapting course contents, training techniques etc., to be relevant to the requirements of the manpower

working in the libraries This needs to be a continuous never ending cycle

Continuing Education Facilities in India

The professional workers in the libraries have mainly two options to further their competence and fulfill their educational needs Either they can go for full time courses of longer duration in library schools, or they can go for shorter programmes of continuing education, or in-service training programmes can be planned for them A variety of possibilities exists

In full time course after bachelor's programme one can turn to master's programme known variously as Master of Library and Information Science (M L I Sc), or Master of Library Science, of one year duration As stated earlier 40 university library schools offer this programme in India After this there are two programmes available i e Master of Philosophy (M Phil) or Doctor of Philosophy (Ph D) in the subject Only in the recent past need has been expressed in the profession to have M Phil programme, a post P G and pre doctoral programme in LIS, like other disciplines Only six library schools have been reported to offer this programme in LIS

As observed, there is less demand for this programme among the professional workers, as only at about six places out of 78 LIS schools, M Phil programme is available The reason may be that it is a full time programme and requires professional workers to be away from the job for one year or more In comparison, in most of the LIS schools having facilities for Ph.D in the subject, people can enroll for Ph D without having M Phil degree

A number of university LIS schools (i.e 30) offer Ph D programmes in the subject, viz

- Bangalore University in Karnataka
- University of Calicut in Kerala,
- University of Delhi,
- Karnataka University,
- University of Kerala,
- University of Madras in Tamil Nadu,
- Punjab University in Chandigarh,
- University of Rajasthan, Jaipur, etc

The Ph D programme in LIS has become extremely popular in India The chief evident reason being the qualification laid down by UGC, both for the academic as well as professional positions For all faculty positions and

professional positions as college librarian or assistant/deputy as well as librarian in the universities, Ph   's helpful. Specially since January, 1986 for positions as college librarian, assistant librarian in the university and assistant professor/ lecturer in the LIS school, the Ph.D. qualification provides facility of early personal promotion.[13]

The other major option for professional workers in libraries to continue education is what are popularly known as continuing education programmes offered by a number of agencies. Parson (1988) who has worked in the area of continuing education programmes for academic librarians, has listed 26 type of activities in this area. These have been grouped into:

1   Course work modes,
2.   Interaction category, and
3.   Self - teaching category.

In all Parson (1988) has identified 24 formats in these three categories. These are as follows :[14]

I   *Course work category*

    1.   Credit courses for degree
    2.   Course for enrichment
    3.   Institutes/workshops (1 day)
    4.   Institutes/workshops (2 days/longer)
    5.   Mini or short courses
    6.   Business/industry-sponsored courses

II.   *Interaction category*

    7.   Meetings, conferences, conventions
    8.   Committees or task force groups
    9.   Invited conferences
    10.   Internships
    11.   In house lectures/seminars
    12.   In house staff meetings
    13.   "Bull sessions"
    14.   Field trips
    15.   Staff exchange programmes

III.   *Self-teaching category*

    16.   Presenting reports of experiences

17	Reading
18.	Informal study groups
19	Teaching in credit courses
20	Research
21	Writing for publication
22.	Editing professional writing
23	Consultation work
24	Home study

Library activities, are passing through a transitional phase due to the ever increasing concern for utilising information in most of our activities at a faster rate and also due to other factors like technological changes Traditional library practices are being discarded or being suitably adapted with modern information technology However, the regular LIS courses, as observed in recent literature, do not fully neutralise these pressures by suitable changes in the curriculum As observed by Rajasekharan (1990)

> "Over the years, we are turning out training librarians from our library schools with the help of a well developed infrastructure available The infrastructure for library education available in India is mainly concentrated on pre-service training of librarians, grossly neglecting the continuing education aspect of the working librarians [W]ithout some provision of continuing education in accordance with the current developments, one cannot be expected to work satisfactorily as an efficient librarian for long The need for revising the curricula of library education, and more important, the need for providing continuing education for working librarians arise in this context"[15]

We find emphasis in Indian LIS literature, to initiate continuing education programmes, at least in the past two decades Almost all the professional gatherings discussing LIS education have felt so Seminars on the subject at Nagpur, and Delhi LIS schools, as well as conferences of Indian Library Association (ILA) and Indian Association of Special Libraries and Information Centres (IASLIC) have stressed on provision for continuing education programmes As a result we find activity in this area Special mention can be made of some institutions like Documentation Research and Training Centre (DRTC), Bangalore, Indian National Scientific Documentation Centre (INSDOC), Delhi, National Information System for Science and Technology (NISSAT), Delhi, some of the LIS schools like the one at Nagpur and Ujjain, who have institutionalised continuing education programmes in LIS

Kumar and Ramachandran (1985) have surveyed the continuing education programmes. "Not even a single seminar was organised" before 1960 is their observation. Reviewing the subject for the period after 1960, they have said :

"After 1960 the situation started changing. The university libraries suddenly started growing at a rapid rate with the generous support of the UGC. New buildings, growing collections, increased number of users, demand for specialised services, warranted qualified librarians and change in library education".[16]

Between 1960 and 1985 around 62 seminars, symposia, workshops, etc were organised. In their analysis, DRTC comes out to be the only institution, organising regularly continuing education programmes in LIS. It was much later that LIS schools joined in. "During a span of five years, i.e. from 1980-85 as many as 35 programmes were organised by various library schools". Other agencies taking interest in continuing education in LIS, are ILA, IASLIC, etc. in associations; DESIDOC, NISIET (Hyderabad) etc. in addition to DRTC in institutions; etc. The UGC, British Council and USIS have been major funding agencies for these activities.[17] Recently Raja Ram Mohun Roy Library Foundation and NISSAT have also been supporting continuing education activities in LIS.

Kumar and Ramachandran (1985)[18] have grouped the continuing education activities under the following heads :

- Conferences,
- Seminars,
- Symposia,
- Courses, and
- Summer/Winter institutes.

As per their analysis the duration of the continuing education programmes has been ranging from one day to more than a fortnight, four day programmes being 'much common', and those of a fortnight and beyond are mainly workshops and summer/winter institutes.

In view of above, a lot more needs to be done in the area of continuing education. Anand (1980) writes about regular full time courses that "Most of the courses provide excellent acquaintance with fundamentals and are, therefore, too formal. These degrees, at present, are a mere initiation into a life-long process of learning. The real education, in fact starts after joining the professional

stream The experienced incumbents, on the other hand, are usually without higher professional degrees Since experience is no substitute for professional education and vice-versa, continuing education, with and without leading to superior degrees is essential "[19]

While planning for continuing education, Anand (1980) suggests to consider "the needs of a particular library community, the current and future role, training and development, experience and needs of participants, who may be practicing librarians, teachers or persons with administrative responsibilities for government, university, academic or any other library" [20]

It can be deduced from the literature that the regular LIS full time courses are not sufficient in providing knowledge, skills and attitudes for working at professional level in various positions in the libraries In addition, for reasons of obsolescence due to transition phase in information handling techniques and development of libraries, and increasing needs of the information users, the knowledge and skills etc of the professional workers have to be updated periodically to maintain relevance to the library operations and services So there is continuous educational demand from the professional workers, which has to be considered while planning activities in continuing education in LIS Various agencies, the LIS schools, LIS professional associations, etc need to involve themselves more seriously in this direction They are required to analyse the educational needs of the professional workers, their expectations from LIS educational programmes, etc before planning and offering such programmes

Conceptualisation of the Study

Waghray (1985)[21] analysing the aim of manpower programmes has observed that the "aim should be to change present pattern of behavior to new patterns specified by the employing organisation as necessary for effective performance to work The implications of the aim are that employees failing to reach a required level of work performance can be helped by training if the requirements for effective performance and the present level of the employees performance have been clearly identified" He has further specified that effective performance can be worked out after a detailed job analysis in terms of skills needed knowledge required, desirable attitudes, and organisational environment. The identification of training needs depends on a clear definition of a job together with criteria for effective performance' [22]

The Seminar on Library and Information Science Education in India

(Delhi) (1977) in its recommendations states :

"The Seminar recognises the need to review and redesign the present syllabus of Library Science/Library and Information Science courses at the bachelor's and master's level to meet the changing requirements of libraries/ information centres/documentation centres and towards this end recommends the following steps be undertaken...

(a)   conduct of a survey of the utilisation of graduates of library science schools, and

(b)   framing of guidelines for developing appropriate curriculum for the post-graduate course... which would meet the requirements of different professional levels".[23]

The seminar has thus pointed out need for review and redesign of curriculum to meet the requirements of professional workers at different levels.

The persons working at different levels in libraries have been found to be interested in updating their knowledge and improve their qualifications even by going for full time regular programmes in LIS schools.

In the survey of utilisation of graduates of library schools, not restricted to any kind of library in India, by Gupta (1978),[24] 73.32 per cent of the respondents indicated their willingness for enrollment to advanced courses, out of which only 30.3 per cent were working in non-administrative position, showing thereby a high tendency among administrators for advanced training. This study pointed out a clear demand for post MLISc programmes in LIS, as 81.25 per cent of the respondents, who indicated yes for joining advanced courses in LIS, were already possessing master's level qualification in LIS. The study concludes :

"A wide gap between library training and library work exists which has been emphasised by a large number of respondents. In their suggestions about courses and curriculum again they have emphasised to correlate theory and practice of librarianship".[25]

Chatterjee (1987)[26] has stressed the need for continuing education programmes in LIS in India on account of various reasons :

—   Those coming out of LIS schools are not equally equipped for the profession.

— some of the schools still continue with traditional courses without any change in syllabus for more than a decade

— Many professionals have to wait for a long time before getting suitably employed By this time their subject knowledge is obliterated alarmingly

— New areas and application of ideas and techniques from other subjects, such as computer science, statistics, management science, operations research, etc which our schools are not yet fully equipped to cope with

— Most of the courses conducted by library schools lack proper orientation, and as a result there is a big gap between LIS instructions and practice

— *There is little scope for in-service training of professional workers*

Chatterjee (1987) in above survey has also identified agencies organising continuing education programmes in LIS in India

The LIS schools, the library associations (specially ILA and IASLIC) in association with many other institutions, National Information System for Science and Technology (NISSAT) in association with other institutions, INSDOC, DRTC, UGC, DESIDOC, SENDOC, NITIE, etc have been organising short term programmes for continuing education in the recent past

Roy (1987) in his presidential address to the XVI All India Conference has not only criticised the production of LIS manpower in the country without market survey of requirements, but has also emphasized the need of maintaining relevance of LIS education with practice [27]

While surveying the continuing education programmes offered in LIS in India during the period 1982-1987, Chatterjee (1987)[28] has, among other factors, observed that subject choice of the programmes is not always helpful "While some subjects are of traditional nature having little continuing education value, many newly developing areas or applications, which are now having great impact on the profession, such as new management principles, statistical techniques, new information retrieval networks, reprography, etc remain uncovered or less covered Chatterjee has observed that there is lack of courses, oriented to the needs of the workers of different types of libraries Chatterjee has also inferred that "the courses are not always effective due to high theoretical contents and less practical bias"

Gopinath (1985)[29], while outlining the professional skills needed for library and information services, in addition to traditional areas has included in

the list the managerial skills, statistical skills, knowledge of computer programming etc. Only a counted few LIS schools provide for training in these skills to some extent.

A study of LIS literature published in India by Amba and Raghavan (1985)[30] also reveals areas, such as statistical techniques, computer applications, management techniques, means and modes of communication, etc. which are inadequately covered by LIS educational programmes. All these areas reflect the application of ideas and techniques of other subjects made use or of relevance to LIS practice.

A recent study by Shrivastava (1992) surveying LIS education in India has studied the course contents of MLISc and BLISc courses. The courses in MLISc when ranked are as follows :[31]

Course Areas	Percentage of Schools
— Dissertation - project report	100 per cent
— Universe of knowledge	65 per cent
— Depth classification/Advance classification theory	65 per cent
— Advance cataloguing theory	65 per cent
— Advance library system/library organisation and management of either public/academic or special library	65 per cent
— Classification practice	65 per cent
— Cataloguing practice	65 per cent
— Fundamentals of information service	40 per cent
— Comparative librarianship	30 per cent
— Documentation and information retrieval or documentation and reference service or documentation	30 per cent
— Information storage and retrieval	25 per cent
— Research and statistics	25 per cent
— Advance reference service Part - A, and B, Bibliography of literature in social sciences/natural sciences/ applied sciences/or in humanities	25 per cent
— Systems analysis and library management or system analysis and statistical methods	25 per cent

Above courses are taught by 25 per cent or more schools at MLISc level In comparison a small percentage of schools have taken up new areas showing the influence of information science, modern information technology, etc as revealed below

— Information centres organisation and management	20 per cent
— Information communication	15 per cent
— Computer applications in libraries	15 per cent
— Information systems and programming	10 per cent
— Information control technologies	10 per cent
— Information transfer and dissemination	10 per cent
— Management and evaluation of libraries	10 per cent

This shows inadequate planning of courses at national level None of the LIS schools in India have been reported to expose the graduates to practical library situations

In addition Shrivastava (1992) has reported that 55 per cent of the heads of the LIS schools feel that course contents of the MLISc in Indian LIS schools are not sufficient and 71 79 per cent of them feel so about BLISc course [32]

Kapoor and Ravinder Kaur (1978-79/79-80) (the publication is irregular and the study was carried out much after 1980) have reported in the study 'Current trends in library science education' that the course contents of LIS are less practice oriented [33]

The difference in approach by educational programmes, with greater emphasis on theory and lack of realisation of needs of working professionals, has been observed and is reflected in many writings Mittal (1977) lays down the following objectives for continuing education programmes, which point out clearly to shift the emphasis towards actual job-requirements of working professionals [34]

(i) To improve the efficiency of the working professionals,

(ii) To help them to adapt themselves to the changing needs of their libraries,

(iii) To provide them opportunities for their personal and professional development,

(iv) To enable them to get increased job satisfaction,

(v) To help them improve their career prospects,

(vi) To bring them the excitement of new ideas, and

(vii) To help develop staff flexibility to meet the stringency of funds.

So there is a need to know the demands of working professionals in terms of their educational needs, which in most parts is a function of their job. It can be safely presumed that the activities performed in the libraries will determine the demands made upon the professional workers and in turn their educational requirements. The information so obtained can be supplemented as well as cross validated by the expression of educational needs by the professional workers, to infer their educational needs.

Review of LIS literature has shown that activities performed by the LIS working professionals vis-a-vis their educational needs had not been the subject of study to find out its impact upon educational programmes in India.

In view of the changing university library scenario, the information pertaining to the job-activities performed at professional level in the university libraries, their importance, the time spent on these, etc., can be of immense help in designing the course programmes for librarians. The educational needs of university library professional staff has not been the subject of systematic study as evident in the Indian LIS literature. Information in this area can be of extreme help in planning, designing and implementation of reorientation programmes, continuing education programmes, MLISc programmes, M.Phil. programmes already available, etc., reflecting the needs of the professional staff in the university libraries. Thus the area educational needs of university libraries in Job dimension has been selected for the study.

Objectives of the Study

The objectives of the study include :

1.   To study the background characteristics of the professional librarians in university libraries;

2.   To find out the educational needs of the professional librarians in the university libraries to be revealed by the job-dimensions,

   (i)   in terms of job-activities performed by the professional library workers;

   (ii)   in terms of the time devoted by professional library workers to perform various job-activities;

   (iii) in terms of the importance attached to various job-activities performed by the professional library workers.

3   To find out the educational needs of the professional librarians in the university libraries,

    (i)   as revealed by their interest in undertaking courses in different subject areas in LIS and other related areas,

    (ii)   as revealed by their views on available LIS training programmes in the library schools,

    (iii) as revealed by the courses they lack,

    (iv) as revealed by their expectations from LIS schools, and

    (v)   as revealed by their participation in courses in LIS during their library service.

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RESEARCH METHODOLOGY USED IN THE STUDY

In order to study the educational needs of the professional workers in the university libraries, it was felt that a multi-faceted approach will be helpful to collect the relevant data. The reason for this thinking was that the data collected by different approaches will be able to afford the cross validation of data collected, as well as it will minimise the short-comings in data collected through a single approach. The overall relevance of data, to support the inferences to be drawn, will be of a superior quality. This approach has proved useful in the similar study carried out by Kortendick and Stone (1971)[1] So it was decided to follow the approach outlined in this study with suitable modifications in the Indian context.

To collect information about the activities being actually performed by the librarians in the universities formed the first approach to collect data for the study. To derive relevant inference in terms of educational needs of the professional workers working in the university libraries, it was assumed that the educational needs will be a function of the job-activities performed by the professional workers.

It was felt that actual study of what librarians at professional levels in the university libraries are doing will be more objective and relevant, rather than the subjective assessment of what they may need in educational context. The questionnaire has been used as an instrument to find out from the librarians at these levels in the university about the job activities performed by them

directly, the proportionate amount of time devoted by them to each of the activities and the proportionate importance attached to each of the activities they perform, irrespective of the time devoted by them. The data so collected is assumed to be free from bias and most suitable for the study, as the incumbents on the jobs are the best judge of the importance of the job-activities they perform and time required in performing these activities. Taylor (1919)[2], Smith (1964)[3], Stone (1969)[4], Kortendick and Stone (1971) etc., have advocated this approach. In the context of LIS profession there is no such study in India, to draw upon.

The **second approach** to collect data for the study has been to find out the educational needs as expressed by the professional workers in the university libraries who constitute to be the respondents in the study. Again for the result of this study i.e. the educational needs of the librarians in the universities, it has been decided to find out from them about their educational needs, i.e. in order to do their jobs better what are their educational needs. The questionnaire has again been used as an instrument to find out this information from the professional librarians in the university libraries by asking for the subject areas in which they would like to attend courses, workshops or other short term programmes, or would they opt for full time regular courses like M. Phil., Ph.D., etc., in the LIS school or other schools. The questionnaire has also been used to find out about the educational programmes they lack which could have helped them to improve their competence to do the job they are engaged in. It also finds out about the scientific, technical and professional courses they lack which could have helped them to improve their competence to do the job they are engaged in, and the areas of their job in which they feel that they were not prepared during the regular educational programmes they have attended.

As a **third approach**, the questionnaire has also been used to find out information relating to individual respondent, e.g. experience, position, education, courses attended (short term) after joining the position, age, etc. It was intended as supplementary information to use along with the information obtained through the approaches stated above. This provides another dimension to find out about the educational needs, which the future course designers can use profitably because the courses will have to consider these differing features of the heterogeneous group, varying widely in age, background qualification, interest in the courses, expectations from the continuing education programmes, etc. In this study these variables will help to understand the educational needs of the respondents better and put in proper context the educational needs expressed by them.

The Questionnaire

Taking into consideration the above approach, the questionnaire prepared by Kortendick and Stone (1971) was modified to make it suitable for the present study on Indian university libraries Length of the questionnaire had to be considerably reduced in order to increase the response rate Some of the questions were deleted, added or modified, in view of the study conducted by the author in (1977)[5], which surveyed the past graduates from a few library schools in India working in various libraries This study served as a pilot study for the present work, in the Indian conditions

The questionnaire has been used to collect the data for this study As an initial effort the questionnaires were sent to the Chief Librarian of all the universities taken in the study except the University of Rajasthan Library Due to a very poor response despite a number of requests, it was decided to visit the university libraries in the study to meet personally the population at this stage Initially it was thought to postpone the visit until after the replies to the questionnaire are received to seek further clarifications and to conduct interviews of a selected sample Efforts were made to make the data collection comprehensive The data from the University of Rajasthan Library was collected rather easily

The questionnaire* has the following areas to get information from the respondents

Part 1	— Evaluating the activities you perform in relation to time and importance
	A Specialised library functions
	B General administration and management
Part 2	— Your educational needs
Part 3	— Some information about yourself and your career
	A Your present job
	B Your education
	C Your experience
	D Personal information
Part 4	— Your ideas and comments

Part 1 - Evaluating job-activities you perform

The part one of the questionnaire has been designed to find out information

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* Given as Appendix B on page 235 44

on the job-activities performed by the professional workers employed in the university libraries, the relative amount of time they devote to the activities they directly perform and the relative importance of the activities performed by them with reference to the position they are employed in the university libraries.

In the recent literature on library and information science education, it has been accepted that the curriculum for LIS should lay emphasis on the actual needs of the librarians. Tyagi (1979) while observing on national plan for library education and training in India stated :

"Grave doubts are being expressed about our library schools for making the courses too theoretical and the need for keeping these on ground level is repeatedly stressed ... Most immediate needs of the profession should not be ignored in favour of the big and long-term aims."[6]

Kapoor and Banerjee (1987)[7] emphasising on adoption of a systematic process for curriculum design have observed that an analysis of a job or a subject is an essential step in identifying the instructional objectives. According to them formulation of learning objectives, analysis of structure of the subject, task/topic analysis and identifying required knowledge or skill will facilitate in clearly identifying the subject matter to be learnt. The detailed task/topic analysis helps in defining the understanding, knowledge and competence required for carrying out the tasks analysed.

Anand (1980) while discussing the planning of curriculum for continuing education programmes for library professionals states that the programmes should emerge in response to the needs of a particular library community. "An individual is the best judge of his professional and academic jobs and only he can carve out a desired course for himself."[8]

Similarly Rajan Pillai (1986) while discussing training needs for information professionals in India has recommended the 'function-oriented training.' In his views "Any consideration of the system of training to be meted out has to be on a par with the present set up, function and purpose of the existing information centre... In order to co-relate the training offered and its adoption on the practical plan, the programme of education may be organised as function oriented."[9]

Not only in the subject of LIS but in many other disciplines the educational needs have been identified after analysis of job-activities performed by the professionals. Examples can be found in the area of management, banking,

accountancy, etc

In trying to find out what the professional workers do at job, a simple and effective method is the use of the questionnaire as an instrument. In comparison to other methods, like interview of professional workers, or adopting a diary to record information about activities performed by the respondents, the inventory of activities in the form of questionnaire was preferred because this is amenable to statistical analysis. This also makes the respondent free from the dependence on recall and the response can be structured enough to lend itself to further uniform interpretation. Similarly in the interview technique, the interviewer's quality of interviewing and value of dependence on schedule or recall factor, etc., are important and can vary at different occasions

The job inventory in the questionnaire groups activities in broader groups, e.g. Indexing and Abstracting, Reference, Planning, Staffing, etc. These groups have been further grouped under two - A. Specialised library functions, and B. General administration and management. In all the subgroups in A. Specialised library functions, a place for 'other' activity(ies) has been provided in the questionnaire to permit respondents to name and add any activity(ies) which they perform and do not find enumerated in the questionnaire

Part 2 - Your educational needs

From the recent directions issued by the University Grants Commission, it is evident that emphasis has been laid on post-graduate degree in LIS for the posts of university assistant librarian, deputy librarian as well as university librarian, college librarian, and teachers in various LIS schools. The UGC appointed a committee (the Mehrotra Committee) to go into the pay-scales and qualifications, etc. of the teachers and librarians in the universities and colleges. While discussing the issue of promotion of librarians in the universities and colleges the Mehrotra Committee report (1987) stated as follows

> "The promotion of librarians should be linked with the acquisition of additional qualifications. In the context of the rapid developments in modern technology in management of libraries, it becomes essential that librarians be given opportunities, like duty leave, etc., for improving their competence. They should also be enabled to attend summer-schools workshops and seminars and satisfactory performance in the summer schools may be taken into account for promotion. While the progress in information science and technology demands a substantial increase in the technical competence of librarians, their academic

competence and general awareness have also to be upgraded continuously."[10]

Similarly the National Policy on Library and Information System (1986) has referred to the need of librarians to keep themselves up to date in knowledge through systematic continuing education programmes. In its para 7.4 it observes:

> "In view of the challenging and dynamic situation in the profession, the Indian library and information professional must be given every facility to refresh his/her expertise so as to keep abreast of advancing knowledge by a planned development of continuing education programmes in the field."[11]

The profession in India has appreciated the problems as well as trends in LIS development in the country. A lot of questioning is being done with a view to have self-introspection for future direction. Recently Biswas (1991) in his presidential address in the XXXVII All India Library Conference, Madras posed questions to be discussed and addressed to by the profession.

"It is said that institutions are built by individuals. This is quite often reflected in the statements of users about a ...library or library staff. Who are these professionals called librarians? What are their educational and professional perquisites, do they need further specialisation or should their training be more broad-based and diversified"[12]

With this background in mind and as inferred from the literature survey of LIS education and continuing education in the country, it was decided to know about the views of the professional workers regarding their educational needs. Their views can play a vital role in shaping the future continuing education programmes, as it is felt that people undergo continuing education programmes more often as a result of their personal interest and choice in the programmes. Moreover, the continuing education programmes, as these are meant for mainly the employed professional workers, should reflect and aim at fulfilling the perceived educational needs of these persons. Not only these programmes will be better attended, if planned in this manner, but these will also fulfill the actual demands made upon LIS education. The views of the professional workers thus can serve as basis for LIS education and can help remove the stigma of planning these programmes in an unsystematic manner without considering the needs of the profession today.

The part two of the questionnaire has thus been designed accordingly

— to know whether the professional workers in the university libraries are interested in undertaking some training in different areas of LIS,

— to know their preference for workshops and seminars (i e few days to four weeks programmes), or the regular courses, intensive short term courses in LIS,

— to know their subject areas of interest in studying in LIS, and whether these areas pertain to the job-activities performed by them in the libraries or in the new areas of LIS

— to know their interest in undertaking courses in other subject areas (i e in addition to LIS), and what are these subject-areas, and

— to know their expectations from LIS schools, etc

Part 3 - Information about professional workers

The part three of the questionnaire seeks to collect information about the professional workers and their job characteristics The part three will provide necessary information to understand their response in part one and two of the questionnaire Some of the questions in part three have been included as check questions to cross-validate their response to part two of the questionnaire, regarding their interest in undertaking training in subject areas other than LIS and their expectation from LIS schools

The part three of the questionnaire has been designed accordingly.

— to collect information about the background of respondents, i e their job, level of employment, major work areas of employment, their educational level, their experience in libraries and in other occupations, etc

— to collect information with a view to supplement information on their educational needs in LIS or other scientific, technical or professional courses, and the courses they have attended,

— to know about the utilisation of their talents in the libraries, weak areas of their training in LIS schools their competence in certain activities and the reason for the same, etc

Part 4 - Their reaction (ideas and comments) about this study

The part four includes a few open ended questions The first question, your comments on job activities (e g part 1 of this questionnaire) seeks to find

out their reaction to the job-activities in general and specially about the job - activities listed in part one of the questionnaire.

The second question seeks the suggestions for 'courses and curricula' from professional workers in the university libraries. There is a third question which seeks their suggestions and reaction to the present study itself.

The Sample Design

The topic of this study itself has conceived some limitations. As evident the study is limited to the university libraries. The study of university libraries was considered appropriate due to their stage of development in the country as well as due to relative convenience in carrying out the study. The university libraries in India, as compared to other types of libraries, are well developed. These are comparatively large libraries and provide employment to a large number of LIS professional workers in the country. Currently the university libraries are at a stage of its growth when modern information technology is being inducted in library activities or being seriously planned for use in the near future. These libraries are attempting to resort to resource sharing and networking activities to augment their individual resources and services. Consequent upon University Grants Commission's initiative to plan and implement an ambitious project of networking of libraries in the country under the project name- INFLIBNET, a large number of university libraries will form nodes of this network. Considering these factors it was felt that the university libraries provide ideal sub-system of libraries in the country where the educational needs of professional workers can be studied to provide relevant and helpful information for LIS course builders in the country.

To carry out study involving university libraries was also convenient to the investigator specially because of his experience of working in the university as a teacher in LIS department and as a professional worker at the managerial level.

The topic is limited to investigate the educational needs of professional librarians. The scope of the term 'professional librarians' has been limited by the application of two characteristics for the purpose of this study. It includes the persons working in the university libraries,

(i)   at the level of professional assistant (senior technical assistant) or at a higher level than this, and

(ii)   who possesses at least a bachelor degree in LIS.

The level of professional assistant (also known as senior technical assistant) is the lowest level in the sample, although there are library workers at the level lower than this who possess bachelor's (or even higher) degree in LIS The reason for the decision was that in a number of universities the required qualification at the levels lower than senior technical assistant does not include degree in LIS Moreover it has been observed that workers at the level of senior technical assistant and level higher than this are more often participants of continuing education programmes Thus the four levels of librarians, as given below, constitute the population for this study

— Senior technical assistant (Professional assistant),
— Assistant librarian (Professional junior),
— Deputy librarian (Professional senior), and
— University librarian

The university libraries located in the state of Rajasthan and Delhi formed part of this study In order to select a more uniform group of libraries, some of the libraries were not included in this investigation The criteria employed for this purpose are

(i) the libraries of the institutions deemed to be universities were left out, and

(ii) the libraries of the universities established in 1985 or later were left out

The reasons to leave out the libraries, as a result of application of above criteria are to exclude university libraries with only a few professional workers, e g M D S University, Ajmer (with only one temporary library in charge constituting professional librarian), Banasthali Vidyapeeth, Banasthali (with 2 to 3 professional librarians), etc This also simultaneously helped to leave out libraries with a very small collection and having scanty services, being of very recent origin A number of universities in Rajasthan and Delhi have come into existence after 1985, viz Kota Open University, Kota, Rajasthan Agricultural University, Bikaner, National Museum Institute of Art, Conservation and Museology, Delhi, etc

The existing universities, including institutions deemed to be universities, in Rajasthan and Delhi along with the year of establishment, are as follows

Rajasthan

1   University of Rajasthan, Jaipur (1947)

2.   Mohanlal Sukhadia University, Udaipur (1962)
3.   Jai Narain Vyas University, Jodhpur (1962)
4.   Maharshi Dayanand Sarswati University, Ajmer (1987)
5.   Rajasthan Agricultural University, Bikaner (1987)
6.   Kota Open University, Kota (1987)
7.   Birla Institute of Technology and Science, Pilani (1964)
8.   Banasthali Vidyapeeth, Banasthali (1983)
9.   Rajasthan Vidyapeeth, Udaipur (1987)
10. Jain Vishwa Bharati Institute, Ladnun (1991).

Delhi

1.   University of Delhi (1922)
2.   Jawaharlal Nehru University (1968)
3.   Jamia Millia Islamia (1988)
4.   Indian Agricultural Research Institute (1958)
5.   Indira Gandhi National Open University (1985)
6.   National Museum Institute of History of Art Conservation and Museology (1989)
7.   School of Planning and Architecture (1979)
8.   Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth (1987)
9.   Jamia Hamdard (1989).

There are two other 'institutions of national importance' in Delhi i.e. Indian Institute of Technology and All India Institute of Medical Sciences. These impart education and award degrees, but are not defined as university or the institutions deemed to be university.

Applying the criteria stated above, the following five universities have been included in the sample :

In Rajasthan

1.   University of Rajasthan, Jaipur
2.   Mohan Lal Sukhadia University, Udaipur, and
3.   Jai Narain Vyas University, Jodhpur.

In Delhi

4.   University of Delhi, Delhi, and
5.   Jawaharlal Nehru University, New Delhi.

As already stated the professional workers at four levels, i.e. professional

assistants and above have been included in the population. No further sampling in the population has been done. All the professional persons working at the level of professional assistant and above, therefore, formed the population for this investigation.

TABLE 1
BREAKDOWN OF THE TOTAL POPULATION OF PROFESSIONAL LIBRARIANS BY INSTITUTIONS AND JOB-LEVEL

SL. NO	INSTITUTION	PROF ASSISTANTS			ASSTT LIBRARIAN			DEPUTY LIBRARIAN			UNIV LIBRARIAN			Total	
		1	2	3	1	2	3	1	2	3	1	2	3	NO	%
1	UNIVERSITY OF DELHI	60	5	55	20	-	20	15	2	13	1	-	1	89	52.98
2	JAWAHARLAL NEHRU UNIVERSITY	20	1	19	10	1	9	7	-	7	1	1	-	35	20.83
3	UNIVERSITY OF RAJASTHAN	11	1	10	15	5	10	4	-	4	1	1	-	24	14.29
4	JAI NARAIN VYAS UNIVERSITY	8	-	8	5	-	5	1	-	1	1	1	-	14	8.33
5	MOTILAL SUKHADIA UNIVERSITY	3	-	3	2	-	2	1	-	1	-	-	-	6	3.57
	TOTAL	102	7	95	52	6	46	28	2	26	4	3	1	168	100.00

1 = TOTAL NO, 2 = VACANT / LONG LEAVE, 3 = ACTUAL OCCUPANTS

In order to identify the population, the author tried to reach the population through the university librarians in the sample universities. Unfortunately the response was not very encouraging. As a result, the population identification was also supplemented by personal visit to the university libraries. Lists of staff members were collected and their status and place of posting was identified, so that the questionnaire may be administered. The table 1 shows the population by institution and their job-level in the five

universities in the sample.

The questionnaire was administered to 168 persons. In the two university libraries in Delhi and in one of the libraries in Rajasthan i.e. at University of Rajasthan Library, Jaipur, the questionnaire was administered to the respondents personally, whereas at the Libraries in Jodhpur and Udaipur the questionnaire was mailed and pursued with the help of the respective university library in charge. The table 2 summarises the response received by institution.

TABLE 2
BREAKDOWN OF RESPONSE OF PROFESSIONAL
LIBRARIANS BY INSTITUTIONS

SL. NO.	Name of Institution	Professional Population	Response Received		Incomplete Questionnaries	Computable Response	
			NO.	%	NO.	No.	%
1.	UNIVERSITY OF DELHI	89	60	67.416	NIL	60	52.632
2.	JAWAHARLAL NEHRU UNIVERSITY, DELHI	35	30	85.714	3	27	23.684
3.	UNIVERSITY OF RAJASTHAN, JAIPUR	24	19	79.167	1	18	15.789
4.	JAI NARAIN VYAS UNIVERSITY, JODHPUR	14	5	35.714	NIL	5	4.386
5.	MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR	6	4	66.667	NIL	4	3.509
	OVERALL RESPONSE	168	118	70.238	4	114	100.00

In all, the population comprised of 168 persons in the five universities, the maximum being in the University of Delhi Library i.e. 89, followed by Jawaharlal Nehru University Library i.e. 35, in Delhi. In Rajasthan, the maximum population was in the University of Rajasthan i.e. 24, followed by Jai Narain Vyas University

Library i e 14 and Mohan Lal Sukhadia University, Udaipur i e 6 The above figures do not include professionals on long leave and vacant staff positions In effect 52 98 per cent of the available population was in University of Delhi Library, 20 83 per cent in Jawaharlal Nehru University Library, 14 29 per cent in University of Rajasthan Library, 8 33 per cent in Jai Narain Vyas University Library, and 3 57 per cent in Mohan Lal Sukhadia University Library

Out of the total population of 168, 118 professional librarians responded to the questionnaire, i e the response rate was 70 24 per cent Some of the respondents did not respond to the questionnaire due to lack of requisite qualification A number of persons in the population refused to complete the questionnaire for unexpressed reasons Four out of the 118 responses received were incomplete and thus were not computable In all 114 computable responses were received i e 67 86 per cent of the population for the study Computable response comprised of 52 63 per cent from University of Delhi Library, 23 68 per cent from Jawaharlal Nehru University Library, 15 79 per cent from the University of Rajasthan Library, 4 39 per cent from the Jai Narain Vyas University Library, and 3 51 per cent from the Mohan Lal Sukhadia University Library

The response rate was highest i e 85 71 per cent from Jawaharlal University Library followed by 79 17 per cent from University of Rajasthan Library, 67 42 per cent from University of Delhi Library, 66 67 per cent from Mohan Lal Sukhadia University Library and the least response 35 71 per cent from Jai Narain Vyas University Library

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3

University Library Professional Personnel

The data collected through questionnaire has been tabulated and analysed to find out various background characteristics of professional personnel working in the university libraries. The part three of the questionnaire was meant to collect this information. The information about university professional personnel has been grouped under various headings relating to persons, their job and education, to make the information meaningful in the rest of the study. This information has also helped to qualify the analysis of the data and inference drawn from the study.

Variables relating to the job of the respondents and personal variables have been grouped into job-level of respondents, type of position, sex, age, professional experience, and utilisation of talents. Educational variables used are degrees in LIS, and other academic degrees. This chapter also finds out the activities in which the respondents are primarily engaged in the library.

'ob-Level

The respondents included only professional personnel working in the university libraries. Although, the sample could be divided into four job-levels, i.e. professional assistants (or senior technical assistants), assistant librarians (or professional juniors), deputy librarians (or professional seniors), and the university librarians, but the later has not been shown as a separate group. The reason behind this decision was the vacant posts of university librarians. Out of the university libraries included in the study, the position of the post of

university librarian was as follows :

—   Only one of the universities in the sample, i.e. University of Delhi has the University Librarian.

—   In one university i.e. Mohan Lal Sukhadia University, Udaipur, the post of the university librarian is not there and the deputy librarian is in charge of the University Library.

—   In rest of the university libraries in the sample the position of university librarian was lying vacant, and the deputy librarian was officiating the position.

Hence it was decided to merge the responses from university librarian/ acting university librarian with the job-level deputy librarians. Thus, it provided for the purpose of this study three groups or job-levels.

The table 3 provides the data about the job-level of the respondents.

TABLE 3
DISTRIBUTION OF RESPONDENTS BY JOB-LEVEL

SL. NO.	JOB-LEVEL	NO. OF RESPONDENTS	% OF RESPONDENTS
1.	Prof. Assistants	60	52.632
2.	Asstt. Librarians	36	31.579
3.	Dy. Librarians	18	15.789
	TOTAL	114	100.000

Position

It was decided to group the respondents into two major groups, i.e. administrators and non-administrators. In the Job-level deputy librarian and assistant librarian, it can be safely inferred that the persons working at these job-levels fall into administrative position. This is eminently visible, taking into consideration their pay-scales, nature of work, number of library staff supervised, total number of staff in the library where they work, and the job-activity items checked by them in part 1 of the questionnaire in this study.

However, the distinction was not obvious in the case of professional assistants. In a number of situation their job-classification varies a great deal. In order to avoid ambiguity, the author took into consideration, the nature of work performed by the professional assistant, the number of persons working at the location where professional assistant is employed, and the job-activity items checked by the professional assistant, before assigning the respondent to administrator's group or otherwise.

The table below shows the distribution of respondents by position and job-level

TABLE 4

DISTRIBUTION OF RESPONDENTS BY POSITION AND JOB-LEVEL

SL. No	JOB-LEVEL	ADMINISTRATORS		NON ADMINISTRATORS		TOTAL	
		NUMBER	%	NUMBER	%	NUMBER	%
1	Professional Asstts	18	25 352	42	97 674	60	52 632
2	Asstt Librarians	35	49 296	1	2 326	36	31 579
3	Dy Librarians	18	25 352	0	0 000	18	15 789
	TOTAL	71	100 000	43	100 000	114	100 000
	% OF RESPONSE		62 281		37 719		100 000

Sex Ratio

In the survey of professional librarians in this study 64 91 percent of the respondents were men. The table below provides the relation of job-level and position of the respondents to sex

Sex ratio worked out in the study points out a trend that as we go higher in the job level, the percentage of men increases. As shown in the table, where only 61 11 per cent are men in administrative professional assistants, the percentage in administrative position of men increased to 65 71 in assistant librarians and 83 33 in deputy librarians. Similarly in non-administrative positions 57 14 per cent were men at the job level professional assistants, and the women

TABLE 5
RELATION OF JOB-LEVEL AND POSITION OF RESPONDENTS TO SEX

SL. NO.	TYPE OF POSITION & JOB-LEVEL	SEX					
		MEN		WOMEN		TOTAL	
		No.	%	No.	%	No.	%
ADMINISTRATORS							
1.	Professional Asstts.	11	61.111	7	38.889	18	25.352
2.	Asstt. Librarians	23	65.714	12	34.286	35	49.296
3.	Dy. Librarians	15	83.333	3	16.667	18	25.352
SUB-TOTAL		49	69.014	22	30.986	71	100.000
NON-ADMINISTRATORS							
1.	Professional Asstts.	24	57.143	18	42.857	42	97.674
2.	Asstt. Librarians	1	100.000	0	0.000	1	2.326
3.	Dy. Librarians	0	0.000	0	0.000	0	0.000
SUB-TOTAL		25	58.140	18	41.860	43	100.000
TOTAL		74	64.912	40	35.088	114	100.000
FOR ALL POSITIONS							
1.	Professional Asstts.	35	58.333	25	41.667	60	52.632
2.	Asstt. Librarians	24	66.667	12	33.333	36	31.579
3.	Dy. Librarians	15	83.333	3	16.667	18	15.789

constituted only 42.86 per cent. At the level of non-administrative assistant librarians, there was only one person who was man. There were no non-administrative deputy librarians.

Further there were lesser women in the administrative position. There were 41.86 per cent women in the non-administrative positions. This ratio fell to 30.99 per cent among the administrative positions.

The statistics of the overall respondents repeats the trend described above. The percentage of number of men increased as we go higher in the job-level. There were 58.33 per cent men in the professional assistants. The percentage of men increased to 66.67 in assistant librarians, and to 83.33 in deputy librarians. So, it is in the non-administrative professional assistants that the ratio of women is the highest.

For the purpose of analysis the position of university librarians (or the in charge of the university libraries) has been merged with the deputy librarians, however, it has been observed that men constitute 100 percent amongst the university librarians in the sample. Again it points out that as we go higher up, the percentage of men increases in the professional librarians.

Age Distribution

For all the respondents the mean age in the sample was 46.25 years. The table 6 shows the age characteristic of the respondents.

Mean age of administrators is higher than non-administrators, as expected. It is 47.63 years for administrators. The highest mean age, again as expected is of administrative deputy librarians, i.e. 53.61 years, and the lowest mean age is of the non-administrative professional assistants, i.e. 43.90 years. The mean age increases as we go higher up in job-levels, in administrative as well as non-administrative positions. For administrative positions, the mean age is 45.50 years for professional assistants, 45.63 years for assistant librarians, and 53.61 years for deputy librarians.

Among women also the mean age increases as we go to the higher job-levels. In administrative positions, the women professional assistants have the mean age 42.14 years, assistant librarians 46.25 years, and deputy librarians 50.00 years. Unexpectedly amongst the administrative positions in the men, the assistant librarians are younger than the professional assistants 45.31 years as compared with 47.64 years for professional assistants. The men deputy librarians in the administrative positions, as expected, as a group have the highest mean age among the respondents, i.e. 54.33 years. Such comparisons are not possible among the non-administrative positions, as there is no non-administrative deputy librarian among the respondents. Similarly, though unexpected, there is one non-administrative man assistant librarian, who is engaged in the work of library automation.

TABLE 6
AGE-WISE DISTRIBUTION OF RESPONDENTS
BY POSITION AND JOB-LEVEL

SL. NO.	TYPE OF POSITION & JOB-LEVEL	MEAN AGE FOR WOMEN AND MEN	MEAN AGE FOR WOMEN	MEAN AGE FOR MEN	NO. OF RESPONDENTS		
					WOMEN	MEN	TOTAL
ADMINISTRATORS							
1.	Professional Asstts.	45.50	42.14	47.64	7	11	18
2.	Asstt. Librarians	45.63	46.25	45.31	12	23	35
3.	Dy. Librarians	53.61	50.00	54.33	3	15	18
	For all Job-levels	47.63	45.45	48.61	22	49	71
NON-ADMINISTRATORS							
1.	Professional Asstts.	43.90	42.22	45.17	18	24	42
2.	Asstt. Librarians	47.00	NA	47.00	0	1	1
3.	Dy. Librarians	NA	NA	NA	NA	NA	NA
	For all Job-levels	43.98	42.22	45.24	18	25	43
	For all Respondents	46.25	44.00	47.47	40	74	114
FOR ALL POSITIONS							
1.	Professional Asstts.	44.38	42.20	45.95	25	35	60
2.	Asstt. Librarians	45.67	46.25	45.38	12	24	36
3.	Dy. Librarians	53.61	50.00	54.33	3	15	18

Among women also the mean age increases as we go to the higher job-levels. In administrative positions, the women professional assistants have the mean age 42.14 years, assistant librarians 46.25 years, and deputy librarians 50.00 years. Unexpectedly amongst the administrative positions in the men, the assistant librarians are younger than the professional assistants: 45.31 years as compared with 47.64 years for professional assistants. The men deputy librarians

in the administrative positions as expected as a group have the highest mean age among the respondents, i.e. 54.33 years. Such comparisons are not possible among the non-administrative positions, as there is no non-administrative deputy librarian among the respondents. Similarly, though unexpected, there is one non-administrative man assistant librarian, who is engaged in the work of library automation.

A characteristic observed for women respondents revealed that in general the mean age for women in all positions as well as job-levels, is lower than men, as well as the age for all respondents. The exceptions are that of administrative women assistant librarians, who with 46.25 years mean age are older than men (45.31 years), as well as amongst assistant librarians in all respondents where women's mean age is 46.25 years and that of men 45.38 years.

For all job-levels taken together, there is only a difference of 3 to 4 years for men, women as well as for all respondents taken together among administrative and non-administrative librarians. As the non-administrative group is mainly composed of professional assistants, a comparison of mean age for professional assistants with other job-levels has not been done. There was a difference of 9.23 years between professional assistants and deputy librarians of all positions and sexes taken together, the former being younger. When for all positions, professional assistants are compared with assistant librarians, they are younger by 1.29 years for all respondents, younger by 4.05 years among women, but were older by 0.57 year among men. As the difference among professional assistants and assistant librarians for men as well as all respondents taken together is very small, it warrants some explanation. It may be the result of selection and promotion policy for assistant librarians in the university libraries which follows the UGC's guidelines for selection. As in the UGC's guidelines, experience is not stated as a minimum qualification for the post of assistant librarian, persons younger than professional assistants can join as assistant librarians. Moreover, for the post of professional assistants, in all the three universities in Rajasthan, there is no direct recruitment by open selection. Thus, persons from lower cadres from within the institution are selected/promoted, resulting into higher age of professional assistants. In comparison there is no built in promotion from the post of professional assistant to the post of assistant librarian. Thus there are sufficient chances of younger persons in getting selected as assistant librarians.

Professional Experience

For all respondents the mean professional experience in the sample was 20 years. The table 7 shows the professional experience characteristic of the respondents.

TABLE 7

PROFESSIONAL EXPERIENCE-WISE DISTRIBUTION OF RESPONDENTS BY POSITION AND JOB-LEVEL

SL. NO.	TYPE OF POSITION & JOB-LEVEL	MEAN PROFESSIONAL EXPERIENCE			NO. OF RESPONDENTS		
		FOR WOMEN AND MEN	FOR WOMEN	FOR MEN	WOMEN	MEN	TOTAL
ADMINISTRATORS							
1.	Professional Asstts.	18.28	17.00	19.09	7	11	18
2.	Asstt. Librarians	20.83	22.50	19.96	12	23	35
3.	Dy. Librarians	28.50	26.67	28.87	3	15	18
	For all Job-levels	22.14	21.32	22.51	22	49	71
NON-ADMINISTRATORS							
1.	Professional Asstts.	16.83	16.67	16.96	18	24	42
2.	Asstt. Librarians	1.00	0.00	1.00	0	1	1
3.	Dy. Librarians	NA	NA	NA	NA	NA	NA
	For all Job-levels	16.47	16.67	16.32	18	25	43
	For all Respondents	20.00	19.23	20.42	40	74	114
FOR ALL POSITIONS							
1.	Professional Asstts.	17.27	16.76	17.63	25	35	60
2.	Asstt. Librarians	20.31	22.50	19.20	12	24	36
3.	Dy. Librarians	28.50	26.67	28.87	3	15	18

NA = NOT APPLICABLE

Number of mean years of professional experience of administrators is as expected, higher than non-administrators It was 22 14 years for administrators for all job-levels whereas for non-administrators it was 16 47 years

The highest mean professional experience, again as expected is of administrative deputy librarians, i e 28 50 years, and the lowest mean professional experience is that of non-administrative assistant librarian The later is an exception as in the sample there is only one non-administrative assistant librarian and that too with professional experience of one year Leaving aside this exception the least professional experience is of non-administrative professional assistant group, i e of 16 83 years

Mean professional experience increases as we go higher up in job-levels in administrative group, whereas in the non-administrative group a lone assistant librarian is an exception Among administrative group, mean professional experience is 18 28 years for professional assistants, 20 83 years for assistant librarians, and 28 50 years for deputy librarians

Among women as well as men the mean professional experience increases as we go on to higher job-levels Among women the professional experience of professional assistants is 17 00 years in the administrative positions and 16 67 years in the non-administrative positions For women administrative assistant librarians, the experience is 22 50 years, and for deputy librarians it is 26 67 years In comparison among men professional assistants the experience is 19 09 years in administrative positions, and 16 96 years in non-administrative positions For men administrative assistant librarians the experience is 19 96 years and of deputy librarians it is 28 87 years As observed the men administrative deputy librarians have the maximum years of professional experience, as was true of their age among the sample Men professional librarians at all job-levels and positions have more professional experience than the women The only exception observed is in the case of assistant librarians, in administrative positions as well as when all positions taken together Whereas in administrative positions the women assistant librarians have 2 54 years more experience, the difference increases slightly to 3 3 years more than men, for all positions taken together

The comparison in non-administrative group at various job-levels has not been made as there is only one assistant librarian and no deputy librarian among non-administrators

For all job-levels taken together, the difference in professional

experience in men, women or both taken together among administrative, non-administrative or all positions taken together, is very small i.e. 0.35 year to 1.19 years only. It points out that at lower levels there is stagnation with very less chances of vertical movement from one level to another level. Now, since 1986 according to UGC's guidelines the assistant librarians with 13 to 16 years of professional experience can be promoted to the job-level deputy librarian, but from professional assistant job-level to that of assistant librarian there is no built-in process of promotion. This is due to open selection policy for the post of assistant librarian and that too requiring no professional experience as minimum qualification.

When we compare the mean professional experience for all positions taken together at various job-levels, the general trend remains as discussed above. The mean average experience among men, women, as well as when all are taken together increased with the increase in the job-level.

In order to understand the impact of full time regular courses, which have become available more and more during the past two decades, and consequent improvement in qualification by the existing professional librarians, average years of professional experience after the last professional degree has been calculated and compared with the total professional experience. The table 8 shows the mean professional experience after last professional degree (i.e. BLISc/MLISc) by position and job-level and compares it with total professional experience.

The mean experience after last professional degree is 18.32 years. Except deputy librarians' group, who are represented only in administrative position, in all other job-levels, positions, and for all respondents taken together, as expected, the professional experience after the last professional degree earned is less than the total professional experience. The case of the lone non-administrative assistant librarian is an exception, with only one year total experience, as well as experience after last professional degree. This points to the trend among professional librarians to continue education during service at master's level in LIS.

TABLE 8
DISTRIBUTION OF PROFESSIONAL EXPERIENCE AFTER LAST PROFESSIONAL DEGREE OF RESPONDENTS BY POSITION AND JOB-LEVEL

SL NO	TYPE OF POSITION & JOB LEVEL	MEAN YEARS OF EXPERIENCE		DIFFERENCE	NO OF RESPONDENTS
		TOTAL EXPERIENCE	EXPERIENCE AFTER LAST PROF DEGREE	(3-4)	
(1)	(2)	(3)	(4)	(5)	(6)
	ADMINISTRATORS				
1	Professional Asstts	18.28	15 89	2 39	18
2	Asstt Librarians	20 83	19 46	1 37	35
3	Dy Librarians	28 50	28 50	0 00	18
	For all Job-levels	22 14	20 85	1 29	71
	NON-ADMINISTRATORS				
1	Professional Asstts	16 83	14 48	2 35	42
2	Asstt Librarians	1 00	1 00	0 00	1
3	Dy Librarians	NA	NA	NA	NA
	For all Job-levels	16 47	14 16	2 31	43
	For all Respondents	20 00	18 32	1 68	114
	FOR ALL POSITIONS				
1	Professional Asstts	17 27	14 90	2 37	60
2	Asstt Librarians	20 31	18 94	1 37	36
3	Dy Librarians	28 50	28 50	0 00	18

NA = NOT APPLICABLE

The experience after the last professional degree, like the measure of total professional experience, increases as we go to higher job-levels among administrative positions. For administrative professional assistants it is 15.89 years, for assistant librarians 19.46 years, and for that of deputy librarians it is 28.50 years. As the non-administrative group has only one assistant librarian and no deputy librarian, this comparison has not been done. Like total professional experience, the non-administrative librarians have less experience after the last professional degree (14.16 years) as compared with administrative librarians (20.85 years).

The difference between the total professional experience and the experience after last professional degree was noted. The difference is maximum (2.39 years) for the administrative   professional assistants and the minimum (0.00 year) for the administrative deputy librarians. Also the difference is higher (2.31 years) for all job-levels taken together among non - administrative positions than administrative positions (1.29 years), whereas for all positions and job-levels taken together it is 1.68 years.

The difference in two measurements of professional experience can be used to infer that at lower job-levels professional librarians more often go for full time LIS courses during service than at higher levels (c.f. the difference 2.39 years for professional assistants and 0.00 year for deputy librarians among administrative positions). Similarly, for all job-levels taken together non-administrative professional librarians go for full time degree courses in LIS during service more often than those in administrative positions (c.f. the difference of 2.31 years for non-administrative positions and 1.29 year for administrative positions).

When the professional experience after last degree characteristic is seen for different job-levels (for all positions taken together), the inference drawn above holds good, the experience increases with the increase in job-level (14.90 years for professional assistants, 18.94 years for assistant librarians, and 28.50 for deputy librarians). Similarly, the difference between the two measurements of professional experience for all positions taken together, the inference drawn earlier holds good, i.e. the professional librarians at lower level more often go for full time regular courses of study in LIS during service (c.f. the difference 2.37 years for professional assistants, 1.37 year for assistant librarians and 0.00 year for deputy librarians).

The table 9 provides a comparative picture of number, sex ratio, age,

professional experience, and experience after last professional degree of administrative and non-administrative librarians by job-level

TABLE 9
DESCRIPTIVE STATISTICS OF ADMINISTRATIVE AND
NON-ADMINISTRATIVE LIBRARIANS
BY JOB-LEVEL

SL NO	TYPE OF POSITION & JOB LEVEL	NUMBER	SEX RATIO WOMEN	MEN	AVERAGE AGE	AVERAGE PROFESSIONAL EXPERIENCE	
						TOTAL	AFTER LAST PROF DEGREE
ADMINISTRATORS							
1	Professional Asstts	18	38 89	61 11	45 50	18.28	15 89
2	Asstt. Librarians	35	34 29	65 71	45 63	20 83	19 46
3	Dy Librarians	18	16 67	83 33	53 61	28.50	28 50
	For all Job-levels	71	30 99	69 01	47 63	22.14	20 85
NON-ADMINISTRATORS							
1	Professional Asstts	42	42 86	57 14	43 90	16 83	14 48
2	Asstt Librarians	1	NA	100 00	47 00	1 00	1 00
3	Dy Librarians	0	NA	NA	NA	NA	NA
	For all Job-levels	43	41 86	58 14	43 98	16 47	14 16
	For all Respondents	114	35 09	64 91	46 25	20 00	18 32
FOR ALL POSITIONS							
1	Professional Asstts	60	41 67	58 33	44 38	17 27	14 90
2	Asstt. Librarians	36	33 33	66 67	45 67	20 31	18 94
3	Dy Librarians	18	16 67	83 33	53 61	28 50	28 50

NA = NOT APPLICABLE

Types of Library Activity

The respondents were asked to state the types of library activity in which they are primarily engaged. The table 10 presents the result of response received. (Number of respondents in table 10 is higher than the actual number

TABLE 10
FREQUENCY DISTRIBUTION OF TYPES OF LIBRARY ACTIVITIES IN WHICH RESPONDENTS ARE PRIMARILY ENGAGED (BY POSITION AND JOB-LEVEL)

SL. NO.	LIBRARY-ACTIVITIES	JOB LEVEL PROFESSIONAL ASSISTANTS	ASSTT. LIBRARIANS	DEPUTY LIBRARIANS	RESPONDENTS NUMBER	%	RANK OF ACTIVITIES
ADMINISTRATORS							
1.	Head of Library	0	4	3	7	2.76	13
2.	Associate Head	0	7	1	8	3.15	12
3.	Head of Deptt./Div.	8	17	11	36	14.17	2
4.	Branch Head	8	6	3	17	6.69	7
5.	Others	2	1	0	3	1.18	14
NON-ADMINISTRATORS							
1.	Indexing and Abstracting	6	4	2	12	4.72	9
2.	Selection & Acquisition	17	9	3	29	11.42	3
3.	Cataloguing & Classification	23	11	4	38	14.96	1
4.	Circulation and Lending	13	5	2	20	7.87	6
5.	Personnel	2	4	6	12	4.72	9
6.	Reference	10	10	5	25	9.84	4
7.	Translation	0	0	0	0	0.00	17
8.	Public Relation	3	6	4	13	5.12	8
9.	Systems Analysis	0	0	1	1	0.39	15
10.	Non-Print Materials	1	0	0	1	0.39	15
11.	Periodicals	13	6	2	21	8.27	5
12.	Others	6	3	2	11	4.33	11
					254*	100.00	

of respondents because many of them checked more than 1 activity, and administrators checked special library activities also in addition to administrative activity.)

Nearly 15 per cent of the respondents reported that they are primarily engaged in 'Cataloguing and classification' activity which ranked number one (see table 10). The top 10 primary major library activities are listed below along with the percentage each secured as table 11.

TABLE 11
RANKED LIST OF LIBRARY ACTIVITIES IN WHICH RESPONDENTS ARE PRIMARILY ENGAGED

SL. NO	NAME OF ACTIVITY	%
1	Cataloguing & Classification	14 96
2	Head of Deptt. / Div	14 17
3	Selection & Acquisition	11 42
4	Reference	9 84
5	Periodicals	8 27
6	Circulation and Lending	7 87
7	Branch Head	6 69
8	Public Relation	5 12
9	Personnel	4 72
10	Indexing and Abstracting	4 72

The 14 17 per cent of respondents reported their primary activity as Head of department/division'. As the university libraries, in general, are comparatively large libraries organised into department/division at the same or separate locations, the 'Head of the department/division' ranked second largest activity, involving a large number of professional librarians, i e 11 deputy librarians 17 assistant librarians and 8 professional assistants. In comparison the primary activity ranking no 1, involved more librarians at lower level and lesser number of librarians at higher level, i e only 4 deputy librarians, 11 assistant librarians and 23 professional assistants.

The third largest primary activity with 11 42 per cent response is '

Selection and acquisition', which is primary activity of 3 deputy librarians, 9 assistant librarians, and 17 professional assistants.

The fourth largest primary activity is 'Reference' which attracted nearly 10 per cent of the respondents with 5 deputy librarians, 10 assistant librarians, and 10 professional assistants.

The activities which are much lower in the ranking include 'Systems analysis' and 'Non-print material' with less than one per cent response, and 'Translation' with zero response. This points out the poor or almost non-existent translation services in the university libraries. Similarly, non-print material is yet to get established in the university library collection. Similarly, the university library management is still based on traditional methods and not on the system analysis and design concepts. Only one of the total respondents (an assistant librarian) is primarily engaged in library automation.

If the primary library activities are viewed by the number of persons involved by job-level, the deputy librarians are seen chiefly engaged as head of department/division, or involved mainly in activities as 'Personnel', 'Reference', 'Cataloguing and classification', and 'Public relations', each drawing more than 20 per cent of this job-level.

In terms of involvement of assistant librarians, the chief activities are, working as 'Head of department/division' or engaged in 'Cataloguing and classification', 'Reference', 'Selection and acquisition' and working as 'Associate head' in the library. It is interesting to note that the activities 'Personnel' and 'Public relations' do not figure higher in terms of involvement of assistant librarians.

In terms of involvement of professional assistants the major activities are 'Cataloguing and classification', 'Selection and acquisition', 'Periodicals', 'Circulation and lending', and 'Reference.' As generally observed these activities constitute to be the major division of university library operations, and expectedly require major percentage of professional assistants.

Utilisation of Talents

The respondents were asked in the questionnaire: How well does your job utilise your talents? The table 12 presents the results of the responses to the question by position and job-level, as well as for all positions taken together. In general respondents felt that their talents are not being 'fully utilised', as

TABLE 12
UTILISATION OF TALENTS : RESPONSE TO
"HOW WELL DOES YOUR JOB UTILISE YOUR TALENTS?"
BY POSITION AND JOB-LEVEL

SL. NO	TYPE OF POSITION & JOB LEVEL	UTILISATION OF TALENTS										
		Not at all		full capacity		very well		fairly well		very little		Total	
		No	%	No	%	No	%	No	%	No	%	No	%

ADMINISTRATORS

SL. NO	TYPE	No	%	No	%	No	%	No	%	No	%	No	%
1	Professional Asstts.	0	0 00	4	22 22	8	44 44	5	27 78	1	5 56	18	25 35
2	Asstt Librarians	0	0 00	10	28 57	7	20 00	15	42 86	3	8 57	35	49 30
3	Dy Libn.	0	0 00	2	11 11	8	44 44	8	44 44	0	0 00	18	25 35

For all Job-levels		0	0 00	16	22 54	23	32 39	28	39 44	4	5 63	71	100 00

NON-ADMINISTRATORS

SL. NO	TYPE	No	%	No	%	No	%	No	%	No	%	No	%
1	Professional Asstts.	3	7 14	11	26 19	5	11 90	18	42 86	5	11 90	42	97 67
2	Asstt Librarians	0	0 00	0	0 00	0	0 00	1	100 00	0	0 00	1	2 33
3	Dy Libn.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

For all Job-levels		3	6 98	11	25 58	5	11 63	19	44 19	5	11 63	43	100 00
For all Respondents		3	2 63	27	23 68	28	24 56	47	41 23	9	7 89	114	100 00

FOR ALL POSITIONS

SL. NO	TYPE	No	%	No	%	No	%	No	%	No	%	No	%
1	Professional Asstts	3	5 00	15	25 00	13	21 67	23	38 33	6	10 00	60	52 63
2	Asstt Librarians	0	0 00	10	27 78	7	19 44	16	44 44	3	8 33	36	31 58
3	Dy Libn.	0	0 00	2	11 11	8	44 44	8	44 44	0	0 00	18	15 79

NA = NOT APPLICABLE

only 23.68 per cent of the respondents checked this response. Nearly 66 per cent of the respondents felt that their talents are being utilised 'very well' or 'fairly well'. Only about 10 per cent of the respondents felt their talents utilisation as 'very little' or 'not at all.'

There is not much difference in perception about talent utilisation by all job-levels taken together, among administrators, and non-administrators. Only 2.63 per cent of the respondents stated that their talents are not being utilised at all, and surprisingly all of these are non-administrative professional assistants.

Another factor worth noticing is that none of the deputy librarians felt that his/her talents are being utilised 'very little.' In comparison 8.33 per cent of the assistant librarians, and 10 per cent of the professional assistants felt so. A reverse trend is seen if response to 'very well' and 'fairly well' is taken together for all positions at different job-levels, i.e. for professional assistants 60.00 per cent, for assistant librarians 63.88 per cent, and for deputy librarians 88.88 per cent. In general it can be inferred that as we go to higher job-levels, the librarians feel that their talents are being better utilised

EDUCATIONAL VARIABLES

As the study aims to find out educational needs of the professional librarians working in the university libraries, it was decided to find out about the degrees in LIS, as well as in other disciplines held by the respondents. With a view to find out the time elapsed since the last professional degree passed in LIS, the information about the year in which the respondents obtained the last professional degree, was also inquired.

Library and Information Science Degrees

Table 13 and 14 show the distribution of LIS degrees held by respondents by position and job-level. The table 14 shows the percentage for each sub-group out of the total population. Out of all respondents 43.86 per cent of the population have their highest professional degree as bachelor's in LIS, 50.88 per cent have master's degree in LIS, and only 5.26 per cent have still higher professional degree of master of philosophy (M.Phil.) or doctorate in LIS.

Majority of administrative librarians, in each job-level, have master's degree in LIS. i.e. 64.79 per cent of administrative librarians (i.e. 40.35 per cent of the total population), 55.56 per cent of administrative professional assistants (8.77 per cent of the total population), 77.14 per cent of the administrative assistant librarians (23.68 per cent of the total population), and 50.00 per cent of

the deputy librarians (7.90 per cent of the total population) have master's degree in LIS. In comparison, non-administrative librarians in majority have bachelor's degree in LIS as their last professional degree i e 69.77 per cent of the non-administrative librarians (26 32 per cent of the total population) have bachelor's degree in LIS, 27.91 per cent have master's degree in LIS (10.53 per cent of the total population) and only 2.33 per cent have M Phil. or Ph.D. degree in LIS (0 88 per cent of the population)

TABLE 13
EDUCATIONAL VARIABLES: DISTRIBUTION OF LIBRARY AND INFORMATION SCIENCE DEGREES HELD BY RESPONDENTS BY POSITION AND JOB-LEVEL
(SHOWING % OF EACH LEVEL FOR EACH SUB-GROUP)

SL NO	TYPE OF POSITION & JOB-LEVEL	WITH BACHELOR'S DEGREE		WITH MASTER'S DEGREE		WITH M Phil/ Ph.D DEGREE		TOTAL	
		No	%	No	%	No	%	No	%
ADMINISTRATORS									
1	Profess-ional Asstts.	8	44 444	10	55 556	0	0 000	18	25.352
2	Asstt. Librarians	8	22 857	27	77 143	0	0 000	35	49 296
3	Dy Librn.	4	22 222	9	50 000	5	27 778	18	25 352
	For all Job-Levels	20	28 169	46	64 789	5	7 042	71	100 000
NON-ADMINISTRATORS									
1	Professional Asstts	29	69 048	12	28.571	1	2.381	42	97 674
2	Asstt. Librarians	1	100 000	0	0 000	0	0 000	1	2 326
	For all Job-Levels	30	69 767	12	27.907	1	2 326	43	100 000
	For all Respondents	50	43 860	58	50 877	6	5 263	114	100 000
FOR ALL POSITIONS									
1	Professional Asstts	37	61 667	22	36 667	1	1 667	60	52 632
2	Asstt. Librarians	9	25 000	27	75 000	0	0 000	36	31 579
3	Dy Librarians	4	22 222	9	50 000	5	27 778	18	15 789

TABLE 14
EDUCATIONAL VARIABLES : DISTRIBUTION OF LIS DEGREES
HELD BY RESPONDENTS BY POSITION AND JOB LEVEL ·
(SHOWING % OF THE TOTAL POPULATION FOR EACH SUB-GROUP)

SL. NO.	TYPE OF POSITION & JOB-LEVEL	WITH BACHELOR'S DEGREE		WITH MASTER"S DEGREE		WITH M. Phil/ Ph.D. DEGREE		TOTAL	
		NO.	%	NO.	%	NO.	%	NO.	%
ADMINISTRATORS									
1.	Professional Asstts.	8	7.018	10	8.772	0	0.000	18	15.789
2.	Asstt. Librarians	8	7.018	27	23.684	0	0.000	35	30.702
3.	Dy. Libn.	4	3.509	9	7.895	5	4.386	18	15.789
	For All Job-Levels	20	17.544	46	40.351	5	4.386	71	62.281
NON-ADMINISTRATORS									
1.	Professional Asstts.	29	25.439	12	10.526	1	0.877	42	36.842
2.	Asstt. Librarians	1	0.877	0	0.000	0	0.000	1	0.877
For all Job-Levels		30	26.316	12	10.526	1	0.877	43	37.719
For all Respondents		50	43.860	58	50.877	6	5.263	114	100.000
FOR ALL POSITIONS									
1.	Professional Asstts.	37	32.456	22	19.298	1	0.877	60	52.632
2.	Asstt. Librarians	9	7.895	27	23.684	0	0.000	36	31.579
3.	Dy. Librarians	4	3.509	9	7.895	5	4.386	18	15.789

Among Various levels of professional librarians, majority of assistant and deputy librarians in general have higher professional qualifications, i e 77 14 per cent and 50 00 per cent among administrative positions respectively, and 75 00 per cent and 50 00 per cent among all positions taken together respectively Among administrative positions, 77 14 per cent of the assistant librarians and 75 00 per cent for all positions taken together have professional degree higher than bachelor s degree Similarly, among deputy librarians, persons with professional degree higher than bachelor's degree, are 77 78 per cent among administrative positions as well as among all respondents

On the contrary, professional assistants among administrative positions, though in majority (55 56 per cent among professional assistants, and constituting 8 77 per cent of the total population) , have professional qualification higher than bachelor s degree, but are less qualified when compared with assistant and deputy librarians Among non-administrative positions as well as when all positions are taken together, majority of professional assistants have only bachelor's degree in LIS, which are 69 05 per cent among the non-administrative professional assistants (25 44 per cent of the total population) and 61 67 per cent of the professional assistants for all positions taken together (32 46 per cent of the total population)

In general as we go higher in the job-level, the professional qualification possessed by the librarians is also higher The lone non-administrative assistant librarian, however, is an exception, having only bachelor s degree in LIS As evident, 56 14 per cent of all respondents have professional degree higher than bachelor's degree

It has been observed from the response that 1 67 per cent of the professional assistants (constituting 0 88 per cent of the total population) and 27 78 per cent of the deputy librarians (i e 4 39 per cent of the total population) have M Phil or doctorate degree in LIS, whereas none of the assistant librarians has professional degree higher than master s in LIS

Time Elapsed since Last LIS Degree

Table 15 presents frequency distribution of the years in which the respondents obtained their last professional degree, for all the 114 respondents For ease of reference and use, the years have been grouped into classes of five years except the last class covering period after 1989 (i e of 3 years)

TABLE 15
FREQUENCY DISTRIBUTION OF THE YEARS IN WHICH RESPONDENTS OBTAINED THEIR LAST PROFESSIONAL DEGREE BY JOB-LEVEL

JOB — LEVEL

SL. NO.	YEAR IN WHICH PASSED	PROFESSIONAL ASSISTANTS			ASSISTANT LIBRARIANS			DEPUTY LIBRARIANS			TOTAL		
		No.	%	% of total population	No.	%	% of total population	No.	%	% of total population	No.	%	Years elapsed
1.	Before 1970	5	8.33	4.39	7	19.44	6.14	9	50.00	7.90	21	18.42	>23
2.	1970 to 1974	12	20.00	10.53	6	16.67	5.26	3	16.67	2.63	21	18.42	18-22
3.	1975 to 1979	15	25.00	13.16	7	19.44	6.14	1	5.56	0.88	23	20.18	13-17
4.	1980 to 1984	16	26.67	14.03	9	25.00	7.90	1	5.56	0.88	26	22.81	8-12
5.	1985 to 1989	5	8.33	4.39	5	13.89	4.39	2	11.11	1.75	12	10.53	3-7
6.	After 1989	7	11.67	6.14	2	5.56	1.75	2	11.11	1.75	11	9.65	<3
	TOTAL	60	100	52.63	36	100.00	31.58	18	100	15.79	114	100.00	

More than 57 per cent of the respondents obtained their last professional degree before 1980, and another 22.81 per cent passed out their last professional degree between 1980 to 1984 and 20.18 per cent of the respondents obtained their last professional degree after 1984. So a majority of the professional librarians in the universities passed out their last professional degree up to 1984 i.e. 79.83 per cent.

The above trend holds good, if viewed for different job-levels also Among professional assistants 53 33 per cent obtained their last LIS degree more than 12 years ago, and 80 00 per cent passed out last LIS degree before 1985 Similarly, among assistant librarians 55 56 per cent did so before 1980 and 80 56 before 1985 Among deputy librarians, 72 22 per cent passed out last LIS degree before 1980 ago and 77 78 per cent before 1985

As evident in table 15 and as expected, as we go to higher job-levels, the percentage of persons who passed out their last professional degree before 1970 increases i e. 8 33 per cent of the professional assistants, 19 44 per cent of the assistant librarians, and 50 00 per cent of the deputy librarians obtained their last LIS degree before 1970

The trend, as expected, reverses if we view the percentage of librarians at different job-levels who passed out their last LIS degree during the years 1970 to 1984 They constitute of 71 67 per cent of professional assistants, 61 11 per cent of assistant librarians, and 27 78 per cent of deputy librarians

Degrees other than LIS held by Respondents

In order to know about the educational qualifications of respondents, in addition to LIS, the questionnaire sought information in this regard The data so collected has been analysed by position and job-level and further sub-grouped by the level of qualification i e bachelor's, master's and higher degrees (i e M Phil or Ph D) held by them The data for the bachelor's and master's degree has been further sub-grouped into degrees of arts, commerce and science. Table 16 provides the data in the form of percentage of population within each sub-group of the last order Table 17 presents the data without sub-grouping it into arts, commerce and science degrees, but gives the percentage within each job-level

Among the administrative librarians who constitute 62 28 per cent of the sample (i e 71 in number), 3 51 per cent of the population has passed only bachelor s degree, 50 88 per cent of the population passed master's degree, and 7 90 per cent of the population has still higher degrees of M Phil /Ph D The population of non administrative librarians, who are 37 72 per cent in the respondents (43 in number), constitute of 5 26 per cent having bachelor's degree, 31 58 per cent with master s degree, and only 0 88 per cent having M.Phil/Ph.D

TABLE 16
EDUCATIONAL VARIABLES: DISTRIBUTION OF DEGREES (OTHER THAN LIS) HELD BY RESPONDENTS BY POSITION AND JOB LEVEL
(SHOWING % OF THE TOTAL POPULATION FOR EACH SUB-GROUP)

SL. NO.	TYPE OF POSITION & JOB-LEVEL	WITH BACHELOR'S DEGREE			TOTAL		WITH MASTER'S DEGREE			TOTAL		WITH M.Phil/Ph.D.				TOTAL	
		B.A.	B.Com.	B.Sc.	No.	%	M.A.	M.Com.	M.Sc. No.		%	M.Phil. NO.	%	Ph.D. NO.	%	NO.	%
	ADMINISTRATORS																
1.	Professional Asstts.	0.00	0.00	0.00	0	0.00	12.28	0.00	0.88	15	13.16	1	0.88	2	1.75	18	15.79
2.	Asstt. Librarians	0.00	0.00	0.88	1	0.88	21.05	0.00	4.39	29	25.44	0	0.00	5	4.39	35	30.70
3.	Dy. Librarians	1.75	0.88	0.00	3	2.63	10.53	0.88	0.88	14	12.28	0	0.00	1	0.88	18	15.79
	For All Job-Levels	1.75	0.88	0.88	4	3.51	43.86	0.88	6.14	58	50.88	1	0.88	8	7.02	71	62.28
	NON-ADMINISTRATORS																
1.	Professional Asstts.	4.39	0.00	0.88	6	5.26	28.95	0.00	1.75	35	30.70	1	0.88	0	0.00	42	36.84
2.	Asstt. Librarians	0.00	0.00	0.00	0	0.00	0.00	0.00	0.88	1	0.88	0	0.00	0	0.00	1	0.88
	For all Job-Levels	4.39	0.00	0.88	6	5.26	28.95	0.00	2.63	36	31.58	1	0.88	0	0.00	43	37.72
	For all Respondents	6.14	0.88	1.75	10	8.77	72.81	0.88	8.77	94	82.46	2	1.75	8	7.02	114	100.00
	FOR ALL POSITIONS																
1.	Professional Asstts.	4.39	0.00	0.88	6	5.26	41.23	0.00	2.63	50	43.86	2	1.75	2	1.75	60	52.63
2.	Asstt. Librarians	0.00	0.00	0.88	1	0.88	21.05	0.00	5.26	30	26.32	0	0.00	5	4.39	36	31.58
3.	Dy. Librarians	1.75	0.88	0.00	3	2.63	10.53	0.88	0.88	14	12.28	0	0.00	1	0.88	18	15.79

Table 17

EDUCATIONAL VARIABLES : DISTRIBUTION OF DEGREES (OTHER THAN LIS) HELD BY RESPONDEENTS BY POSITION AND JOB LEVEL

(SHOWING % FOR EACH SUB-GROUP WITHIN THE LEVEL)

SL. NO	TYPE OF POSITION & JOB-LEVEL	WITH BACHELOR'S DEGREE		WITH MASTER'S DEGREE		WITH M Phil/ Ph.D DEGREE		TOTAL	
		NO	%	NO	%	NO	%	NO	%
ADMINISTRATORS									
1	Professional Asstts	0	0 00	15	83 33	3	16 67	18	25 35
2	Asstt. Libranans	1	2 86	29	82 86	5	14 29	35	49 30
3	Dy Libranans	3	16 67	14	77 78	1	5 56	18	25 35
	For all Job-Levels	4	5 63	58	81 69	9	12 68	71	100 00
NON-ADMINISTRATORS									
1	Professional Asstts	6	14 29	35	83 33	1	2 38	42	97 67
2	Asstt Libranans	0	0 00	1	100 00	0	0 00	1	2 33
	For all Job-Levels	6	13 95	36	83 72	1	2 33	43	100 00
	For all Respondents	10	8 77	94	82 46	10	8 77	114	100 00
FOR ALL POSITIONS									
1	Professional Asstts	6	10 00	50	83 33	4	6 67	60	52 63
2	Asstt Libranans	1	2 78	30	83 33	5	13 89	36	31 58
3	Dy Libranans	3	16 67	14	77 78	1	5 56	18	15 79

Among all respondents taken together a majority possess (i.e. 82.46 per cent) master's degree, whereas 8.77 per cent have passed only bachelor's degree, and an equal number have M.Phil./Ph.D.

Among professional assistants, 83.33 per cent (i.e. 43.86 per cent of the population) possess master's degree, 10 per cent (i.e. 5.26 per cent of the population) possess only bachelor's degree, and the remaining 6.67 per cent (i.e. 3.51 per cent of the population) have M.Phil./Ph.D. degrees. Among assistant librarians there are 83.33 per cent (i.e. 26.32 per cent of the population) with master's degree, 2.78 per cent (i.e. 0.88 per cent of the population) with only bachelor's degree, and the remaining 13.89 per cent (i.e. 4.39 per cent of the population) with M.Phil./Ph.D. Among deputy librarians, like professional assistants and assistant librarians, majority of them i.e. 77.78 per cent (i.e. 12.28 per cent of the population) have master's degree, 16.67 per cent (i.e. 2.63 per cent of the population) have bachelor's degree, and 5.56 per cent (i.e. 0.88 per cent of the population) have M.Phil./Ph.D.

A large majority of the respondents have degrees in arts, i.e. 72.81 per cent of the population with master's degree in arts and 6.14 per cent of the population with only bachelor's degree in arts. Librarians with science degrees constitute only a small number. Only 8.77 per cent of the population possesses master's degree in science and 1.75 per cent have only bachelor's degree in science. In the areas of commerce only 1.75 per cent of the population have bachelor's or master's degree.

Apparently there is no relationship between the level of qualification and job-level of librarians. Same is the situation if the subjects in which the respondents have obtained degrees vis-a-vis the job-level or position of librarians in the university is observed. There is only a small percentage of librarians working in the university with science or commerce background.

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4

JOB - DIMENSIONS OF THE UNIVERSITY LIBRARIANS

In order to understand the educational needs of the university librarians, the analysis of job-activity items was considered most relevant, because this is what the librarians are expected to perform in the libraries. The survey of job-activity items intends to reveal as to what the professional librarians in the university libraries are actually doing, the relative amount of time being devoted to different specialised library activities, and administrative and management activities, and the relative importance attached to these activities.

QUANTITATIVE ANALYSIS OF JOB-ACTIVITIES

To keep the questionnaire of reasonable length, 43 job-activity items, were listed along with provision for additional activities which may be stated by the respondents, if the work they perform was not covered by the activities listed in the questionnaire.

The activities were grouped into following major job functions.

Specialised library functions

Indexing and abstracting,
Selection and acquisition,
Cataloguing and classification,
Circulation/lending,

Maintenance of holdings,
Reference, and
Other activities.

General administration and management functions :

Planning,
Organising,
Staffing,
Directing,
Coordinating,
Controlling,
Representing, and
Housing.

Only the specialised library functions were sub divided into activities, whereas with each of the general administration and management function annotation was provided, defining the scope of each of these functions. The respondents were asked to check the items which they actually/directly perform, and not the activities which are delegated by them to others/ subordinates. For each of the activities checked, the respondent was expected to check two dimensions, i.e. time, and importance. For each of the two dimensions, the respondent had three choices.

In the 'time' dimension, the respondent was to check : how time consuming the activity marked is as compared to other activities in the job of the respondent. The three choices available were :

1. One that consumes 25 per cent or more time in the job, i.e. one of the most time consuming, or

2. Consumes between 10 per cent to 25 per cent time in the job i.e. substantially time consuming, or

3. Consumes less than 10 per cent time in the job i.e. one of the least time consuming.

Similarly, in the 'importance' dimension also, the respondents were to assess the importance of the activity as compared to other activities, in terms of its contribution to effective performance of their job. The choice for checking was :

1   One of the most important parts of the position, or
2   A substantially important part of the position, or
3   One of the least important parts of the position

The responses so received in the questionnaire have been analysed quantitatively in the following ways

1   Applicability of the job-activities, listed in the questionnaire, to the job being performed by the respondents In other words whether the listed job-activities can be used to effectively describe the job of the respondents

2   Job-activity items checked by the respondents have been analysed separately for the time and the importance dimensions

3   The response to the time and the importance dimensions has been merged for further analysis and analysed

4   The response to various job-activities within each major job-function, stated above, has been combined and analysed

The quantitative analysis using time and importance dimensions needs to be qualified, as the assessment by respondents of various activities in terms of time and importance can not be exact or definitive The response at best can be termed as subjective and relative assessment by the respondents, and can be as helpful as assessments used in social surveys However, the respondents' assessment here is very important, as this helps us to know the nature and structure of the job position of the respondents, and in other words their expectations from the role performed by the professional librarians in their positions This analysis, therefore, is a suitable base to know the educational needs of professional librarians Also the analysis can be helpful in understanding the educational needs actually expressed by the respondents in this survey This information can, to a large extent, help the educational administrators to plan for new courses/continuing education programmes for the university librarians

Applicability of the Job-Activities •

As stated above, each respondent was requested through instructions in the questionnaire to see the statements of job-activities given in two groups in the questionnaire in its part-I specialised library functions, and general administrative and management functions, and to check the activities that

together pertained to his/her job in two dimensions of time and importance. With each major job function (with specialised library functions), space for additional activity was provided, which could be stated and checked, in case the list did not cover the activity performed by him/her. Very few respondents stated other activities, not covered by the list in the questionnaire. Most of the activities stated by the respondents in the space provided for other activities were in fact covered by the list of activities in the questionnaire. The statements of the respondents were, in most of such cases, description of greater intention of the activities included in the questionnaire already. This shows that the items listed in the questionnaire were applicable to the respondents.

The table 18 provides the mean, median, standard deviation, and range of the number of job-activities assessed applicable by the respondents, by type of position. Similarly, the table 19 gives these measures for the number of activities marked applicable by the respondents, by job-levels.

As revealed by the two tables (no. 18 and 19), the respondents' score of applicability of job-activity items varies a lot. The mean number of job-activity items checked by all the 114 respondents, for all activities taken together is 9.149. It is 5.657 for specialised library activities and 3.491 for administrative activities. For all positions taken together the range for specialised library activities checked is 0-16, for administrative activities it is 0-8, and that for all activities taken together 1-20. Similarly the standard deviation for specialised library functions, administrative functions, and all functions taken together is 3.386, 3.174, and 4.698 respectively, when all respondents are taken together.

In table 18, the assessment of applicability of the job-activities is grouped according to administrative and non-administrative positions. Mean number of specialised library activities checked by administrators is 5.943, which is higher than the non-administrators who checked 5.186 mean activities. The standard deviation for the specialised library activities is 3.352 for administrators, which is slightly lower as compared to 3.391 for non-administrators, and the range of specialised library activities checked by administrators is smaller i.e. 0-12 as compared to 1-16 for non-administrators.

The mean for administrative activities, as revealed in the table 18, for administrative positions is 5.408 which is much higher than for non-administrative positions (i.e. 0.325), which is nearly 17 times higher than for non-administrators. The standard deviation is 2.469 for administrators and 0.738

TABLE 18
APPLICABILITY OF JOB-INVENTORY
FREQUENCY OF JOB-ACTIVITIES CHECKED
BY RESPONDENTS BY TYPE OF POSITION

NO OF JOB ACTIVITIES CHECKED	SPECIALIZED			ADMINISTRATIVE			ALL ACTIVITIES TOGETHER		
	LIBRARY ACTIVITIES			ACTIVITIES					
	ADM	NON ADM	TOTAL	ADM	NON ADM	TOTAL	ADM	NON ADM	TOTAL
0	3	0	3	0	33	33	0	0	0
1	1	5	6	8	8	16	0	5	5
2	3	2	5	4	1	5	0	1	1
3	11	9	20	7	0	7	0	6	6
4	13	8	21	6	1	7	1	10	11
5	11	4	15	7	0	7	4	4	8
6	1	2	3	8	0	8	3	3	6
7	6	4	10	8	0	8	5	4	9
8	1	3	4	23	0	23	5	3	8
9	7	1	8	0	0	0	5	2	7
10	5	1	6	0	0	0	7	1	8
11	2	0	2	0	0	0	5	0	5
12	7	3	10	0	0	0	12	1	13
13	0	0	0	0	0	0	8	2	10
14	0	0	0	0	0	0	1	0	1
15	0	0	0	0	0	0	5	0	5
16	0	1	1	0	0	0	2	1	3
17	0	0	0	0	0	0	3	0	3
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	1	0	1
20	0	0	0	0	0	0	4	0	4
TOTAL	71	43	114	71	43	114	71	43	114
MEAN	5 943	5 186	5 657	5 408	0 325	3 491	11 352	5 511	9 149
MEDIAN	5	4	5	6	0	3	12	4	9
STANDARD DEVIATION	3 352	3 391	3 386	2 469	0 738	3 174	3 918	3 453	4 698
RANGE	0 12	1 16	0 16	1-8	0-0	0-8	4-20	1-16	1-20

for non-administrators, and the range is 1-8 for administrators and 0-4 for non - administrators. All these measures are higher for administrators. In effect, as revealed in table 18, the librarians in administrative positions checked more number of job activities both in administrative as well as specialised library activities. Except for specialised library activities, even the range of activities checked by the administrative librarians is higher both when administrative, or all activities are considered together. The standard deviation is larger for administrators for the administrative functions, as well as when all activities are taken together, which indicates a greater variation in job-activity items performed by professional librarians in administrative positions than that of non - administrators. The variation is not much different even in the case of specialised library activities, though it is slightly less in the case of librariansin administrative positions. The same picture is depicted by considering the range of activities performed by the administrators.

The table 19 provides applicability of job-activity items by job-level i.e. professional assistants, assistant librarians and deputy librarians, separately for specialised library functions, administrative functions, as well as all functions taken together. The number of activities applicable to any job - level varied from 1 to 20 for all activities taken together, whereas for various job - levels these had a range of 1 to 20 for professional assistants and assistant librarians, and 5 to 15 for deputy librarians. For specialised library functions the range was decreasing i.e. 1 to 16 for professional assistants, 1 to 12 for assistant librarians, and 0 to 7 for deputy librarians. For administrative functions the range was 0 to 8 for professional assistants and assistant librarians, and 2 to 8 for deputy librarians. In general, the range of job-activities in the job decreases as we go to higher job-levels.

The mean number of specialised library activities checked in general decreases except for assistant librarians, as we go to higher job-levels, which is 5.85, 6.305, and 3.722 for professional assistants, assistant librarians and deputy librarians respectively. On the contrary, the mean number of administrative activities performed increases, as we go to higher job-levels, which is 1.583, 5.055, and 6.722 for professional assistants, assistant librarians, and deputy librarians respectively. Looking at the standard deviation in the activities checked by various job-levels the variation in general decreases as the job-level increases. The median number of job-activity items performed by job-levels also repeats the trend indicated by mean number of activities performed. The median decreases in the specialised library activities, and increases both for the administrative activities as well as when all the activities are taken

TABLE 19
APPLICADILITY OF JOD INVENTORY
FREQUENCY OF JOB-ACTIVITY ITEMS
CHECKED BY RESPONDENTS BY JOB-LEVEL

NO OF ACTIVITIES CHECKED	SPECIALISED LIBRARY ACTIVITIES				ADMINISTRATIVE ACTIVITIES				ALL ACTIVITIES TOGETHER			
	PA	AL	DL	TOTAL	PA	AL	DI	TOTAL	PA	AL	DI	TOTAL
0	0	0	3	3	32	1	0	33	0	0	0	0
1	4	1	1	6	12	4	0	16	4	1	0	5
2	3	1	1	5	2	2	1	5	1	0	0	1
3	11	7	2	20	3	4	0	7	6	0	0	6
4	11	7	3	21	2	5	0	7	10	1	0	11
5	7	3	5	15	2	2	3	7	6	1	1	8
6	2	1	0	3	0	5	3	8	4	0	2	6
7	5	2	3	10	4	2	2	8	5	3	1	9
8	3	1	0	4	3	11	9	23	3	2	3	8
9	1	7	0	8	0	0	0	0	2	5	0	7
10	5	1	0	6	0	0	0	0	4	4	0	8
11	1	1	0	2	0	0	0	0	1	3	1	5
12	6	4	0	10	0	0	0	0	4	4	5	13
13	0	0	0	0	0	0	0	0	5	2	3	10
14	0	0	0	0	0	0	0	0	0	1	0	1
15	0	0	0	0	0	0	0	0	1	2	2	5
16	1	0	0	1	0	0	0	0	1	2	0	3
17	0	0	0	0	0	0	0	0	1	2	0	3
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	1	0	0	1
20	0	0	0	0	0	0	0	0	1	3	0	4
TOTAL	60	36	18	114	60	36	18	114	60	36	18	114
MEAN	5 850	6 305	3 722	5 657	1 583	5 055	6 722	3 491	7 433	11 361	10 444	9 149
MEDIAN	5	5	4	5	0	5	7	3	6	10	12	9
STAND-ARD DEVIATION	3 520	3 272	2 280	3 386	2 471	2 581	1 626	3 174	4 605	4 372	3 095	4 698
RANGE	1 16	1 12	0-7	0-16	0-8	0 8	2-8	0-8	1 20	1 20	5 15	1 20

* LEGENDS   PA   Professional Assistants   AL   Assistant Librarians   DL   Deputy Librarians

together.

Time Dimension

Each job-activity item consumes time to be completed and most often in the performance of job 'time' constitutes an important factor. Though the time dimension response through the questionnaire constitutes a subjective response of the professional librarians, but at the same time it presents perception of the respondents in the context of job-activities performed by them, and thus, can be very important when judged in association with other factors, in the overall performance of the job. It can be taken as an important measure in planning of various continuing education or other courses for the professional librarians.

The following tables/figures have been used to present the data obtained through questionnaire for the analysis of time dimension :

— Number of respondents checking job-activity items according to time, and importance applicability.

— Job-activity items ranked according to highest response for all respondents (Top 20 job-activity items).

— Job-activity items ranking according to weighted time score for all respondents.

— Job-activity items ranked according to weighted time score for all respondents (Top 20 job-activity items).

— Job activity items ranking according to weighted time score by type of position : Administrators.

— Job-activity items ranked according to weighted time score for administrators (Top 20 job-activity items).

— Job-activity items ranking according to weighted time score by type of position: Non-administrators.

— Job-activity items ranked according to weighted time score for non-administrators (Top 20 job-activity items).

— Job-activity items ranking according to weighted time score by job-level : Professional assistants.

— Job-activity items ranked according to weighted time score for professional assistants (Top 20 job-activity items).

— Job-activity items ranking according to weighted time score by job-level Assistant librarians

— Job-activity items ranked according to weighted time score for assistant librarians (Top 20 job-activity items)

— Job-activity items ranking according to weighted time score by Job-level Deputy librarians

— Job-activity items ranked according to weighted time score for deputy librarians (Top 20 job-activity items)

The Appendix table 1 gives the number of respondents checking each job-activity item both according to the time as well as the importance dimensions It also provides distinctive choice of the respondents at three levels for each of the two dimensions, along with total percentage of respondents checking each activity and the rank of each activity as a function of response

In order to get one scale for the responses of the time dimension from three levels i e most, substantial and least, weights were attached to each level Following the model of Kortendick and Stone (1971) 'most time consuming' was given a score of 5, 'substantially time consuming' 3, and 'least time consuming'1 After computing the score with weight, weighted time score was used to construct tables The Appendix table 2 presents the job-activity items ranking according to weighted time score for all respondents, and table 21 provides the top 20 job-activity items ranked according to weighted time score for all respondents By comparison of table 20 and 21, we find that 19 of the 20 job activity items are common It is worth noting that all the 8 administrative functions appear in both the lists Further, the activity items 'responsible for reference and information services provided', 'responsible and/or compile bibliographies, reading lists etc', and 'supervise binding of documents' are common in both the lists are of supervisory nature The administrative function 'housing' in the list of highest response is at number 10, but is placed as 19th item in the list of weighted time score As out of the 42 respondents 28 checked it as 'least time consuming' The administrative function 'directing' has the first position in both the lists Among the specialised library functions, the supervisory activity 'responsible for reference and information services provided' gets the highest rank in both the lists

The table 20 provides a ranked list of top 20 job-activity items, according to highest response for all respondents for time.

<div align="center">

TABLE 20
JOB-ACTIVITY ITEMS RANKED ACCORDING
TO HIGHEST RESPONSE
FOR ALL RESPONDENTS

</div>

SL. NO.	NAME OF ACTIVITY	TOTAL FOR TIME & IMPORTANCE		
		NO.	RANK	%
39	Directing	77	1	67.54
37	Organising	56	2	49.12
23	Reference Service, Responsible for	54	3	47.37
36	Planning	51	4	44.74
40	Coordinating	50	5	43.86
25	Instructions on Information Sources	49	6	42.98
9	Books Clasification	43	7	37.72
41	Controlling	42	8	36.84
42	Representing	42	8	36.84
43	Housing	42	8	36.84
10	Books Cataloguing	40	11	35.09
12	Catalogue and Other Record Maintenance	38	12	33.33
38	Staffing	38	12	33.33
5	Ordering Books and Periodicals	34	14	29.82
6	Procuring Books and Periodicals	31	15	27.19
15	Circulate Holding /Requests	28	16	24.56
20	Binding of Documents, Supervise	28	16	24.56
24	Compilation of Bibliographies, Responsible for	27	18	23.68
26	Reader's Orientation	26	19	22.81
1	Scan Literature	25	20	21.93

MEAN NUMBER OF RESPONDENTS   24.23*

* For all 43 job-activity items

(Top 20 Ranking Job-Activity Items)

TABLE 21
JOB-ACTIVITY ITEMS RANKING ACCORDING TO
WEIGHTED TIME SCORE FOR ALL RESPONDENTS

SL. NO	NAME OF ACTIVITY	WEIGHTED TIME SCORE	RANK
39	Directing	257	1
23	Reference Service, Responsible for	172	2
37	Organising	158	3
36	Planning	155	4
9	Books Classification	149	5
25	Instructions on Information Sources	149	5
10	Books Cataloguing	130	7
40	Coordinating	122	8
5	Ordering Books and Periodicals	120	9
12	Catalogue and Other Record Maintenance	118	10
6	Procuring Books and Periodicals	115	11
41	Controlling	94	12
24	Compilation of Bibliographies, Responsible for	87	13
38	Staffing	84	14
42	Representing	84	14
1	Scan Literature	79	16
15	Circulate Holding /Requests	76	17
7	Maintaining Records	74	18
43	Housing	72	19
20	Binding of Documents, Supervise	70	20

MEAN	70 23 *	
STANDARD DEVIATION	57 15 *	

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

<div align="center">

TABLE 22

**JOB-ACTIVITY ITEMS RANKED ACCORDING TO WEIGHTED TIME
SCORE BY TYPE OF POSITION : ADMINISTRATORS**

</div>

SR. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
39	Directing	240	1
37	Organising	157	2
36	Planning	154	3
23	Reference Service, Responsible for	138	4
40	Coordinating	121	5
25	Instructions on Information Sources	105	6
41	Controlling	91	7
38	Staffing	84	8
42	Representing	80	9
9	Books Classification	78	10
5	Ordering Books and Periodicals	77	11
43	Housing	71	12
24	Compilation of Bibliographies, Responsible for	70	13
6	Procuring Books and Periodicals	60	14
1	Scan Literature	58	15
4	Selection of material, responsible for	56	16
10	Books Cataloguing	55	17
19	Stock Preservation, Responsible for	54	18
12	Catalogue and Other Record Maintenance	51	19
26	Reader's Orientation	50	20

MEAN   51.744*

STANDARD DEVIATION   51.570*

* For all 43 job-activity items

(Top 20 Ranking Job Activity-Items)

The Appendix table 3 provides the response of administrators and Appendix table 4 provides the response of non-administrators according to

TABLE 23
JOB-ACTIVITY ITEMS RANKING ACCORDING TO WEIGHTED
TIME SCORE BY TYPE OF POSITION : NON-ADMINISTRATORS

SR. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
10	Books Cataloguing	75	1
9	Books Classification	71	2
12	Catalogue and Other Record Maintenance	67	3
6	Procuring Books and Periodicals	55	4
25	Instructions on Information Sources	44	5
5	Ordering Books and Periodicals	43	6
15	Circulate Holding /Requests	36	7
13	Classify / Catalogue Technical Reports	34	8
23	Reference Service, Responsible for	34	8
7	Maintaining Records	32	10
11	Subject Headings	32	10
16	Circulate ILL Material	24	12
20	Binding of Documents, Supervise	24	12
1	Scan Literature	21	14
2	Prepare Abstracts	18	15
26	Reader's Orientation	18	15
17	Route Periodicals on Request	17	17
24	Compilation of Bibliographies, Responsible for	17	17
39	Directing	17	17
8	Others	14	20
21	Weeding Out-dated Publications	14	20

MEAN	18 49*	
STANDARD DEVIATION	20 195*	

* For all 43 job-activity items

Top 20 Ranking Job Activity Items

(* The list for non-administrators has 21 job-activity items as the last two activities share the same score)

weighted time score. Table 22 and 23 list the top 20 ranking job-activity items according to weighted time score for administrators and non-administrators* respectively. In the response for administrators, all the eight administrative job functions find place among the first 12 in the list, but only 'directing' finds a place in the list for non-administrators. This indicates the importance of 'directing' function in the job of both administrative as well as non-administrative professional librarians in the university.

Among these lists, 11 items are common and in the first 15 job-activity items 'order and check books and periodicals', 'procure books and periodicals', 'classify and/or reclassify, books', 'responsible for the reference and information services provided', 'scan literature', and 'instruct readers in reference method and information sources' are common. The last two of these rank highest out of the specialised library functions in the list for administrators, whereas among · the non-administrators the job-activities relating to cataloguing and classification find the first three places. The list for non-administrators when compared with that for all respondents (table 21), show that out of specialised library functions the activity 'responsible and/or compile bibliographies, reading lists etc.' does not find a place in the first 15 job-activity items for non-administrators. Rest of the specialised library activities of table 21 find place among the first 15 job-activity items in the list for non-administrators. The common specialised library activities among the first 15 job-activity items are :

- Book cataloguing
- Books classification
- Catalogue and other record maintenance
- Procuring books and periodicals
- Instructions on information sources
- Ordering books and periodicals, and
- Reference service, responsible for

(* The list for professional assistants has 21 job-activity items as the last two activities share the same score.)

Table 24
JOB-ACTIVITY ITEMS RANKING ACCORDING
TO WEIGHTED TIME SCORE BY
JOB-LEVEL : PROFESSIONAL ASSISTANTS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
9	Books Classification	98	1
10	Books Cataloguing	88	2
12	Catalogue and Other Record Maintenance	86	3
6	Procuring Books and Periodicals	· 77	4
39	Directing	77	4
25	Instructions on Information Sources	67	6
5	Ordering Books and Periodicals	66	7
23	Reference Service, Responsible for	65	8
15	Circulate Holding /Requests	54	9
20	Binding of Documents, Supervise	48	10
7	Maintaining Records	47	11
13	Classify / Catalogue Technical Reports	45	12
16	Circulate ILL Material	36	13
19	Stock Preservation, Responsible for	36	13
26	Reader's Orientation	36	13
1	Scan Literature	34	16
11	Subject Headings	34	16
24	Compilation of Bibliographies, Responsible for	34	16
37	Organising	30	19
21	Weeding Out-dated Publications	28	20
41	Controlling	28	20

MEAN	31 139*	
STANDARD DEVIATION	27 4*	

* For all 43 job-activity items

Top 20 Ranking Job-Activity Items

(* The list for professional assistants has 21 job activity items as the last two
activities share the same score)

TABLE 25
JOB-ACTIVITY ITEMS RANKING ACCORDING
TO WEIGHTED TIME SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
23	Reference Service, Responsible for	· 88	1
39	Directing	85	2
37	Organising	82	3
36	Planning	74	4
25	Instructions on Information Sources	63	5
40	Coordinating	51	6
9	Books Classification	50	7
5	Ordering Books and Periodicals	46	8
24	Compilation of Bibliographies, Responsible for	46	8
38	Staffing	44	10
41	Controlling	43	11
10	Books Cataloguing	36	12
6	Procuring Books and Periodicals	35	13
42	Representing	35	13
26	Reader's Orientation	34	15
12	Catalogue and Other Record Maintenance	29	16
7	Maintaining Records	27	17
11	Subject Headings	27	17
43	Housing	24	19
13	Classify / Catalogue Technical Reports	22	20

| | MEAN | 26.26* | |
| | STANDARD DEVIATION | 24.68* | |

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

The Appendix tables 5, 6 and 7 provide weighted time score ranking of job-activity items for professional assistants*, assistant librarians, and deputy librarians respectively. And tables 24, 25 and 26 list 20 top ranking activity items each according to weighted time score for professional assistants, assistant librarians, and deputy librarians respectively. Comparing the three lists, it is evident that number of administrative job functions in the lists increases with the increase in job-level, i.e. higher the job-level more the time devoted to administrative functions. Where the eight administrative functions find place as the first eight activities in the list for deputy librarians, these form part of first nineteen activities in the case of assistant librarians, and as expected only three administrative functions find place in the first 21 job-activities in the case of professional assistants. The 'directing' finds the first place among the administrative functions in all the three lists (as was in the case of administrative and non-administrative librarians). This further strengthens the inference that 'directing' forms an important part in the job of all job-levels and positions in the university libraries. Both in the list of assistant librarians as well as deputy librarians 'housing' function finds a low ranking, showing that much less time is devoted to this administrative function (as was the case in the list for administrators). The function 'housing' does not find a place in the list for professional assistants (as was the case in the list for non-administrators).

The position of administration function in the three three lists is given below

Dy Librarian		Assistant. Librarian		Prof. Assistants	
1	Directing	2	Directing	4	Directing
2	Planning	3	Organising	19	Organising
3	Coordinating	4	Planning	20	Controlling
4	Organising	6	Coordinating		
5	Representing	10	Staffing		
6	Staffing	11	Controlling		
7	Controlling	13	Representing		
8	Housing	19	Housing		

(* The list for professional assistants has 21 job-activity items as the last two activities share the same score)

TABLE 26
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY JOB-LEVEL : DEPUTY LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
39	Directing	61	1
36	Planning	57	2
40	Coordinating	48	3
37	Organising	46	4
42	Representing	35	5
38	Staffing	33	6
41	Controlling	33	6
43	Housing	32	8
1	Scan Literature	24	9
4	Selection of material, responsible for	19	10
23	Reference Service, Responsible for	19	10
25	Instructions on Information Sources	15	12
19	Stock Preservation, Responsible for	12	13
21	Weeding Out-dated Publications	11	14
24	Compilation of Bibliographies, Responsible for	9	15
5	Ordering Books and Periodicals	8	16
20	Binding of Documents, Supervise	8	16
26	Reader's Orientation	8	16
29	Editing Work	7	19
6	Procuring Books and Periodicals	5	20
27	Others	5	20

MEAN   12.00*

STANDARD DEVIATION   16.78*
* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

(The list for Deputy Librarians has 21 job-activity items as the last two activities share the same score.)*

Specialised library activities relating to cataloguing and classification rank highest (first three) in the list for professional assistants (as was the case with non-administrators) On the contrary, these find no place in the list for deputy librarians, but are there in the list for assistant librarians This shows that cataloguing and classification activities consume a lot of time at the level of professional assistants and lesser time at the level of assistant librarians Out of the specialised library activities, common in the lists of all the job-levels, are activities relating to 'Reference', and 'Selection and acquisition' functions only The professional assistants as noted perform more of administrative and supervisory specialised library activities as compared to the non-administrators, as in the list for professional assistants there are three administrative functions and three supervisory specialised library activities, whereas in the list for non-administrators there is only one administrative and two supervisory specialised library activities

Considering all the lists in the time dimension, there are only five job-activity items common. These are 'Directing' out of administrative functions, three activities from the function 'Reference' and 'Order & check books & periodicals etc '

Importance Dimension

As usually conceived the importance of an activity should be the basis for its consideration in the training needs of the profession performing the activity It is felt that the importance of an activity should be the criteria to determine the amount of time that should be devoted to an activity, though in practice, it is not so However, it does play an important role in perceiving the educational needs of the profession by the members of the profession, as well as the educationists Despite this the importance dimension is much more subjective and qualitative as compared to the time dimension which lends to quantification more easily than the importance dimension

Like the time dimension for this study the importance dimension with three levels of expression from which the respondents have checked their response for various activities have been used to rank various activities The following tables have been prepared to present the result of response for the importance dimension

—   Job activity items ranking according to weighted importance score for all respondents

— Job-activity items ranked according to weighted importance score for all respondents (Top 20 job-activity items).

— Job-activity items ranking according to weighted importance score by type of position : Administrators.

— Job-activity items ranked according to weighted importance score for administrators (Top 20 job-activity items).

— Job-activity items ranking according to weighted importance score by type of position :Non-administrators.

— .Job-activity items ranking according to weighted importance score for all respondents.

— Job-activity items ranked according to weighted importance score for non-administrators (Top 20 job-activity items).

— Job-activity items ranking according to weighted importance score by job-level :Professional assistants.

— Job-activity items ranked according to weighted importance score for professional assistants (Top 20 job-activity items).

— Job-activity items ranking according to weighted importance score by job-level : Assistant librarians.

— Job-activity items ranked according to weighted importance score for assistant librarians (Top 20 job-activity items).

— Job-activity items ranking according to weighted importance score by job-level : Deputy librarians.

— Job-activity items ranked according to weighted importance score for deputy librarians (Top 20 job-activity items).

It has been observed that the number of respondents checking the importance dimension does not vary when compared with the time dimension. This is evident from the Appendix table 1. The Appendix table 8 provides job-activity items ranking according to weighted importance score for all respondents. The computation of data to get score in one scale in the importance dimension has been done like the time dimension. The table 27 gives the list of top 20 job-activity items ranked in this manner for all respondents. Like the time dimension here also, the administrative function 'Directing' gets the first rank. Its weighted importance score is 301 which is 99 points higher than the next activity 'responsible for the reference and information services provided. In

TABLE 27
JOB-ACTIVITY ITEMS RANKING ACCORDING TO WEIGHTED IMPORTANCE SCORE FOR ALL RESPONDENTS

SL. NO	NAME OF JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
39	Directing	301	1
23	Reference Service, Responsible for	202	2
36	Planning	197	3
37	Organising	188	4
9	Books Classification	175	5
25	Instructions on Information Sources	155	6
10	Books Cataloguing	146	7
40	Coordinating	142	8
5	Ordering Books and Periodicals	136	9
41	Controlling	132	10
6	Procuring Books and Periodicals	129	11
12	Catalogue and Other Record Maintenance	126	12
42	Representing	122	13
38	Staffing	110	14
24	Compilation of Bibliographies, Responsible for	103	15
43	Housing	98	16
1	Scan Literature	85	17
15	Circulate Holding /Requests	84	18
4	Selection of material, responsible for	80	19
7	Maintaining Records	80	19

MEAN	81 21*	
STANDARD DEVIATION	67 99*	

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

TABLE 28
JOB-ACTIVITY ITEMS RANKING ACCORDING TO WEIGHTED IMPORTANCE SCORE BY TYPE OF POSITION : ADMINISTRATORS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
39	Directing	282	1
36	Planning	196	2
37	Organising ·	187	3
23	Reference Service, Responsible for	166	4
40	Coordinating	139	5
41	Controlling	127	6
42	Representing	118	7
25	Instructions on Information Sources	115	8
38	Staffing	110	9
9	Books Classification	98	10
43	Housing	95	11
5	Ordering Books and Periodicals	89	12
24	Compilation of Bibliographies, Responsible for	82	13
4	Selection of material, responsible for	70	14
6	Procuring Books and Periodicals	70	14
19	Stock Preservation, Responsible for	66	16
1	Scan Literature	64	17
10	Books Cataloguing	61	18
26	Reader's Orientation	58	19
20	Binding of Documents, Supervise	54	20

MEAN   61.88*
STANDARD DEVIATION   62.87*
* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

the remaining activity items in the list, such a big difference is not found in any two consecutive items. In this list all the eight administrative functions are covered among the first 16, whereas in the time dimension for all respondents (in table 21) these formed part of the first 19 activities. This shows that in the importance dimension the administrative functions get higher ranking by the respondents. The specialised library activities in the area of 'Reference' and 'Cataloguing and classification', like time dimension, get higher ranking.

The Appendix table 9 and 10 give job activity items ranking according to weighted importance score for administrators and non-administrators respectively. And, the tables 28 and 29 rank the top 20 activity items for administrators and non-administrators respectively. In these lists 11 job activity items are common. Whereas all the eight administrative functions are ranked among the first eleven job-activities in the list for administrators, only one item i.e. 'Directing' function is covered (as seventeenth activity in the list for non-administrators. The inference from the time dimension is further strengthened here that the 'Directing' function gets preference and carries special importance in the job of both the administrative as well as non-administrative librarians, being the first in the list for administrators and being the only one out of the eight administrative functions getting ranked in the top 20 activities of non-administrators.

In the list for administrators (table 28), in addition to 8 administrative functions, there are five supervisory activities pertaining to the area of 'Reference', 'Selection and acquisition', and 'Maintenance of holdings' As compared with time dimension, the supervisory job activity 'Supervise binding of documents' is additional here. Out of the specialised library those pertaining to job-function 'Reference' get higher ranking, and that of 'Cataloguing and classification' are lower in rank.

In the list for non-administrators (table 29), the number of supervisory job-activities are only three (as compared with 5 supervisory activities in the list for administrators). These pertain to the areas of 'Reference', and 'Maintenance of holdings' Like time dimension, the first three activities pertain to the area of 'Cataloguing and classification'. These are followed by two activities from the area of 'Selection and acquisition' In general the importance dimension almost repeats the trends observed in time dimension, for administrators as well as non-administrators.

TABLE 29
JOB-ACTIVITY ITEMS RANKING ACCORDING TO
WEIGHTED IMPORTANCE SCORE
BY TYPE OF POSITION : NON-ADMINISTRATORS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
10	Books Cataloguing	85	1
9	Books Clasification	77	2
12	Catalogue and Other Record Maintenance	73	3
6	Procuring Books and Periodicals	59	4
5	Ordering Books and Periodicals	47	5
25	Instructions on Information Sources	40	6
23	Reference Service, Responsible for	36	7
15	Circulate Holding /Requests	36	7
11	Subject Headings	36	7
13	Classify / Catalogue Technical Reports	36	7
7	Maintaining Records	34	11
16	Circulate ILL Material	22	12
20	Binding of Documents, Supervise	22	12
24	Compilation of Bibliographies, Responsible for	21	14
1	Scan Literature	21	14
17	Route Periodicals on Request	19	16
39	Directing	19	16
2	Prepare Abstracts	18	18
26	Reader's Orientation	16	19
22	Others	12	20
21	Weeding Out-dated Publications	12	20

MEAN   19.33*
STANDARD DEVIATION   21.90*
* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)
(* The list for non-administrators contains 21 job-activity items as the last two activities share the same score.)

TABLE 30
JOB-ACTIVITY ITEMS RANKING ACCORDING
TO WEIGHTED IMPORTANCE SCORE
BY JOB-LEVEL: PROFESSIONAL ASSISTANTS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
9	Books Classification	104	1
10	Books Cataloguing	93	2
12	Catalogue and Other Record Maintenance	90	3
6	Procuring Books and Periodicals	83	4
5	Ordering Books and Periodicals	82	5
39	Directing	69	6
23	Reference Service, Responsible for	67	7
25	Instructions on Information Sources	67	7
15	Circulate Holding /Requests	60	9
7	Maintaining Records	53	10
13	Classify / Catalogue Technical Reports	51	11
20	Binding of Documents, Supervise	44	12
11	Subject Headings	40	13
24	Compilation of Bibliographies, Responsible for	40	13
1	Scan Literature	38	15
37	Organising	36	16
19	Stock Preservation, Responsible for	34	17
36	Planning	31	18
16	Circulate ILL Material	30	19
17	Route Periodicals on Request	30	19

	MEAN	32 56*
	STANDARD DEVIATION	28 76*

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

The Appendix tables 11, 12 and 13 provide job-activity items ranking according to weighted importance score by job-level for professional assistants, assistant librarians, and deputy librarians respectively. And, the tables 30, 31 and 32 list the top 20 ranking job-activity items according to weighted importance score by job-level for professional assistants, assistant librarians, and deputy librarians respectively.

The ranked list for professional assistants (table 30) is (as in time dimension) very similar to the list by weighted importance score for non-administrators, as 17 job activity items are common in both these lists. The three activities different from non-administrators constitute two administrative functions (in addition to 'Directing') i.e. 'Planning', and 'Organising', and one supervisory specialised library activity, i.e. 'Responsible for preservation of stock'. This further strengthens the earlier observation, that the job of professional assistants involves more of supervisory and administrative functions as compared to non-administrators. When compared with the professional assistants' list in the time dimension (table 24), 18 job-activity items are common in both. The two items which are different from the time dimension are 'Route periodicals on request', and 'Planning', which have been considered by the respondents as more important to the job. As in the time dimension, the first three ranks are occupied by the activities pertaining to 'Cataloguing and classification'. The next two activities are from 'Selection and acquisition'. Out of the administrative functions, 'Directing' retains the first position, as in all the lists observed so far. The 'directing' like the time dimension, finds a much higher rank than non-administrator in this list, as 'Directing' is placed at number six, whereas in the list for non-administrators it has rank 16.

The ranked list by weighted importance score for assistant librarians (table 31), like the time dimension, has all the eight administrative functions. It contains four supervisory functions also. The 'Directing' function gets the first rank, as in the earlier lists. The 'Housing' function is the last of the administrative functions in the ranking. As compared with the time dimension ranking for the assistant librarians, supervisory activities are more, i.e. four in comparison to two in the time dimension. Only three of the activities in the list are different here than the list for the time dimension, which are 'Scan literature', 'Overall responsible for selection of material', and 'Responsible for preservation of stock'. This signifies that supervisory functions are favoured in the importance dimension by the assistant librarians (as compared with the time dimension) at the cost of other specialised library activities. Like the time dimension activities of the area 'Reference', 'Selection and acquisition', and activity 'Classify and/or

TABLE 31
JOB-ACTIVITY ITEMS RANKING ACCORDING
TO WEIGHTED IMPORTANCE SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
39	Directing	155	1
23	Reference Service, Responsible for	106	2
37	Organising	96	3
36	Planning	94	4
25	Instructions on Information Sources	93	5
41	Controlling	63	6
9	Books Classification	62	7
40	Coordinating	61	8
38	Staffing	60	9
42	Representing	53	10
5	Ordering Books and Periodicals	50	11
24	Compilation of Bibliographies, Responsible for	48	12
6	Procuring Books and Periodicals	41	13
10	Books Cataloguing	40	14
26	Reader's Orientation	40	14
43	Housing	40	14
12	Catalogue and Other Record Maintenance	33	17
11	Subject Headings	29	18
1	Scan Literature	28	19
4	Selection of material, responsible for	27	20
7	Maintaining Records	27	20
19	Stock Preservation, Responsible for	27	20

MEAN	33 88*	
STANDARD DEVIATION	34 51*	

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)
(* The list of assistant librarians contains 22 job-activity items as the last three activities share the same score)

TABLE 32
JOB-ACTIVITY ITEMS RANKING ACCORDING TO WEIGHTED IMPORTANCE SCORE BY JOB-LEVEL: DEPUTY LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
36	Planning	71	1
39	Directing	67	2
37	Organising	56	3
40	Coordinating	47	4
42	Representing	43	5
43	Housing	40	6
38	Staffing	37	7
41	Controlling	34	8
4	Selection of material, responsible for	25	9
1	Scan Literature	24	10
23	Reference Service, Responsible for	23	11
25	Instructions on Information Sources.	17	12
24	Compilation of Bibliographies, Responsible for	15	13
19	Stock Preservation, Responsible for	14	14
21	Weeding Out-dated Publications	11	15
5	Ordering Books and Periodicals	10	16
26	Reader's Orientation	10	16
20	Binding of Documents, Supervise	10	16
29	Editing Work	9	19
8	Others	8	20

MEAN   14.09*
STANDARD DEVIATION   19.16*
* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

reclassify books etc.' get higher ranks out of the specialised library activities.

The list by weighted importance score by job-level for deputy librarians (table 32), as obvious, contains all the eight administrative functions which are

having the first eight ranks Surprisingly the 'Directing' function in this list has obtained second rank and the function 'Planning' has robbed the first rank in the list, showing thereby that deputy librarians favour 'Planning' in the importance dimension but consider it less time consuming (c.f. table 26 in the time dimension) as compared with 'Directing' Also the function 'Housing' has obtained rank 6 (in place of 8th in the time dimension) The number of supervisory activities again as in the time dimension, are six In specialised library activities, after 'Responsible for selection of material' and 'Scan literature', activities of the area 'Reference' and 'Maintenance of holdings' gain higher ranking As in the time dimension, the activities of the function 'Cataloguing and classification' do not get a place in this list

Comparing the three lists by job-level in the importance dimension, only 9 job-activity items are found common, out of which three are administrative functions ('Planning', 'Organising', and 'Directing'), three pertain to the area 'Reference', and the other three are 'Scan literature', 'Order and check books and periodicals etc' and 'Responsible for preservation of stock' Comparing the distribution of administrative functions in three lists whereas only three functions are in the list for professional assistants all the 8 are among the first 14 ranks in the list for assistant librarians, and occupied the first eight ranks in the list for deputy librarians The supervisory functions covered are 4,4 and 6 in number in the lists for professional assistants, assistant librarians, and deputy librarians respectively These observations confirm the trend observed in the time dimension, that with the increase in job-level the administrative activities content increases in the job Even the supervisory activities have been rated in this manner in the importance dimension Other trends observed in the time dimension are further strengthened in the importance dimension The function 'Directing' gets the highest rank in the three lists by job-level, except in the list for deputy librarians, where it is second only to 'Planning' The function 'Housing' gets low ranking among the administrative functions and does not find a place in the list for professional assistants However, as compared with the time dimension, the function 'Housing' has improved its rank slightly in the importance dimension when its ranking is observed in the context of all activities in the lists by job-level In the lists for assistant librarians it has moved up from rank 19 to 14, and for deputy librarians from rank 8 to 6 in the importance dimension The 'Cataloguing and classification' function tends to be less represented and goes lower in the ranking with the increase in the job-level

Considering all the six lists in the importance dimension, there are only six job-activity items which are common These are 'Directing' out of administ-

rative functions, three activities from the function 'Reference', 'Scan literature', and 'Order and check books and periodicals etc.'

Joint Time-Importance Dimension

After analysing the response for various job-activities in the dimensions of 'time' and 'importance', the score for these dimensions was used to construct a third dimension i.e. 'joint time-importance' dimension, to achieve one scale of scores for the activities. For each of the 43 job-activity items, the weighted score for the time dimension of each of the 114 respondents was multiplied by his/her weighted score for the importance dimension.

These scores for each job-activity item were added for various groups of professional librarians, and for all respondents separately to achieve one scale of joint time-importance dimension for that job-activity item. As a result the following tables have been prepared to present the data for the joint time-importance dimension.

— Job-activity items ranking according to joint time-importance weighted score for all respondents.

— Job-activity items ranked according to joint time-importance weighted score for all respondents (Top 20 job-activity items).

— Job-activity items ranking according to joint time-importance weighted score by the type of position : Administrators.

— Job-activity items ranked according to joint time-importance weighted score for administrators (Top 20 job-activity items).

— Job-activity items ranking according to joint time-importance weighted score by type of position : Non-administrators.

— Job-activity items ranked according to joint time-importance weighted score for non-administrators (Top 20 job-activity items).

— Job-activity items ranking according to joint time-importance weighted score by job-level : Professional assistants.

— Job-activity items ranked according to joint time-importance weighted score for professional assistants (Top 20 job-activity items).

— Job activity items ranking according to joint time-importance weighted score by job-level :Assistant librarians.

— Job-activity items ranked according to joint time-importance weighted

score for assistant librarians (Top 20 job-activity items)

— Job-activity items ranking according to joint time-importance weighted score by job-level Deputy librarians

— Job-activity items ranked according to joint time-importance weighted score for deputy librarians (Top 20 job-activity items)

— Major job functions ranking according to relative time-importance weighted score by type of position

The Appendix table 14 gives the ranking of job-activity items according to joint time-importance weighted score for all respondents, and the table 33 gives the list of top 20 job-activity items as a result of this ranking. As in the time and the importance dimensions, the 'Directing' function retains the first rank here also. Showing thereby its importance in the job. Only three job-activity items are different and 17 are common in the lists for three dimensions. In general the ranking observed is not very different when compared with the lists for the time and the importance dimensions for all respondents. However, the function 'Housing' does not form part of the list of 20 job-activity items in the joint time-importance dimension. Some more supervisory specialised library activities, i e 'Responsible for selection of material' and 'Responsible for preservation of stock', figure in the list whereas the one 'Supervise binding of documents' is eliminated. Higher ranking specialised library activities are similar as in the time, and the importance dimensions, i e in the areas of 'Reference', 'Cataloguing and classification', and 'Selection and acquisition' functions

The Appendix table 15 and 16 give job-activity items ranking according to joint time-importance weighted score for administrators and non-administrators respectively. And, the tables 34 and 35 list the top 20 ranked job-activity items for administrators and non-administrators respectively obtained as a result of joint time-importance ranking. As expected all the eight administrative functions are there in the list for administrators and these form part of the first fifteen items in the list. In addition there are four supervisory activities in the list for administrators i e 'Responsible for reference and information services provided', 'Responsible and/or compile bibliographies reading lists etc ', 'Overall responsible for selection of material', and 'Responsible for preservation of stock'

TABLE 33
JOB-ACTIVITY ITEMS RANKING ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE FOR ALL RESPONDENTS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
39	Directing	1097	1
23	Reference Service, Responsible for	729	2
36	Planning	673	3
9	Books Classification	629	4
37	Organising	592	5
5	Ordering Books and Periodicals	533	6
25	Instructions on Information Sources	529	7
10	Books Cataloguing	519	8
6	Procuring Books and Periodicals	513	9
12	Catalogue and Other Record Maintenance	446	10
40	Coordinating	434	11
24	Compilation of Bibliographies, Responsible for	379	12
41	Controlling	344	13
38	Staffing	299	14
4	Selection of material, responsible for	294	15
7	Maintaining Records	289	16
42	Representing	286	17
13	Classify / Catalogue Technical Reports	284	18
1	Scan Literature	276	19
19	Stock Preservation, Responsible for	257	20

MEAN

STANDARD DEVIATION   272.23*

* For all 43 job-activity items   238.69*

(Top 20 Ranking Job-Activity Items)

TABLE 34
JOB-ACTIVITY ITEMS RANKING ACCORDING TO JOINT
TIME-IMPORTANCE WEIGHTED SCORE
BY TYPE OF POSITION: ADMINISTRATORS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
39	Directing	1040	1
36	Planning	672	2
37	Organising	591	3
23	Reference Service, Responsible for	589	4
40	Coordinating	431	5
25	Instructions on Information Sources	377	6
9	Books Classification	338	7
41	Controlling	329	8
5	Ordering Books and Periodicals	311	9
24	Compilation of Bibliographies, Responsible for	306	10
38	Staffing	299	11
42	Representing	285	12
4	Selection of material, responsible for	258	13
6	Procuring Books and Periodicals	256	14
43	Housing	235	15
19	Stock Preservation, Responsible for	224	16
10	Books Cataloguing	223	17
26	Reader's Orientation	188	18
12	Catalogue and Other Record Maintenance	183	19
1	Scan Literature	182	20

MEAN	199 88*	
STANDARD DEVIATION	215 30*	

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

TABLE 35
JOB-ACTIVITY ITEMS RANKING ACCORDING TO JOINT
TIME-IMPORTANCE WEIGHTED SCORE
BY TYPE OF POSITION : NON-ADMINISTRATORS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
10	Books Cataloguing	296	1
9	Books Classification	291	2
12	Catalogue and Other Record Maintenance	263	3
6	Procuring Books and Periodicals	257	4
5	Ordering Books and Periodicals	222	5
25	Instructions on Information Sources	152	6
13	Classify / Catalogue Technical Reports	144	7
23	Reference Service, Responsible for	140	8
7	Maintaining Records	127	9
15	Circulate Holding /Requests	116	10
11	Subject Headings	98	11
1	Scan Literature	94	12
16	Circulate ILL Material	91	13
2	Prepare Abstracts	84	14
20	Binding of Documents, Supervise	82	15
24	Compilation of Bibliographies, Responsible for	73	16
17	Route Periodicals on Request	67	17
39	Directing	57	18
26	Reader's Orientation	56	19
18	Others	51	20

MEAN   72.35*
STANDARD DEVIATION   83.91*
* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

The joint time-importance weighted score ranked list for non-administrators also confirms the observations made in the time, and the importance dimensions. Out of administrative functions only 'Directing' finds a place in the list, and out of the supervisory activities there are three i.e. 'Responsible for reference and information services provided', 'Responsible and/or compile bibliographies reading lists etc', and 'Supervise binding of documents'. Activities ranking high pertain to the specialised library functions. The first three job-activity items are from the area 'Cataloguing and classification', and the next two pertain to the area 'Selection and acquisition'. The other specialised library activities of the area 'Reference' also rank high i.e. at number 6 and 8. Out of the lists for three dimensions 19 items are common for non-administrators.

The Appendix table 17, 18 and 19 present the ranking of job-activity items according to joint time-importance weighted score for the professional assistants, assistant librarians, and deputy librarians respectively. And, the tables 36, 37 and 38 provide ranked lists of top 20 job-activity items according to joint time-importance weighted score for the professional assistants, assistant librarians, and deputy librarians respectively.

The joint time-importance weighted score list of first 20 activities for professional assistants (table 36) compares favourably with that of the list for non-administrators in this dimension, as out of 20 only four job-activity items are different in the two lists. The first five items are of the areas 'Cataloguing and classification', and 'Selection and acquisition'. Job-activities of the areas Reference' also find higher ranks. The difference to be noted in the two lists, is that the administrative function 'Directing' finds a rank number six in the list for professional assistants which is much higher, as compared with number 18 in the list for non-administrators. Similarly the list for professional assistants contains two additional supervisory items i.e. 'Responsible for preservation of stock', and 'Overall responsible for selection of material'. Out of the lists for three dimensions for professional assistants 18 items are common.

The joint time-importance weighted score ranked list of top 20 job activity items for assistant librarians (table 37) contains all the eight administrative functions, with again 'Directing' occupying the first rank in the list, followed by the supervisory item 'Responsible for reference and information services provided'. All the items in this list are the same as that of the time dimension and only two are different from the importance dimension i.e. Maintain financial and other records', and 'Classify and/or catalogue public

TABLE 36
JOB-ACTIVITY ITEMS RANKING ACCORDING TO
JOINT TIME-IMPORTANCE WEIGHTED SCORE
BY JOB-LEVEL : PROFESSIONAL ASSISTANTS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
9	Books Classification	410	1
10	Books Cataloguing	358	2
6	Procuring Books and Periodicals	343	3
12	Catalogue and Other Record Maintenance	326	4
5	Ordering Books and Periodicals	307	5
23	Reference Service, Responsible for	258	6
39	Directing	249	7
25	Instructions on Information Sources	231	8
7	Maintaining Records	188	9
13	Classify / Catalogue Technical Reports	175	10
15	Circulate Holding /Requests	157	11
1	Scan Literature	147	12
20	Binding of Documents, Supervise	144	13
24	Compilation of Bibliographies, Responsible for	142	14
19	Stock Preservation, Responsible for	136	15
4	Selection of material, responsible for	114	16
11	Subject Headings	108	17
37	Organising	104	18
16	Circulate ILL Material	100	19
36	Planning	94	20

MEAN   115.21*
STANDARD DEVIATION   109.68*
* For all 43 job-activity items
(Top 20 Ranking Job Activity Items)

TABLE 37
**JOB-ACTIVITY ITEMS RANKING ACCORDING TO JOINT
TIME-IMPORTANCE WEIGHTED SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS**

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
39	Directing	581	1
23	Reference Service, Responsible for	400	2
37	Organising	331	3
36	Planning	324	4
25	Instructions on Information Sources	265	5
9	Books Classification	216	6
24	Compilation of Bibliographies, Responsible for	210	7
5	Ordering Books and Periodicals	186	8
40	Coordinating	173	9
38	Staffing	166	10
10	Books Cataloguing	158	11
41	Controlling	147	12
6	Procuring Books and Periodicals	145	13
26	Reader's Orientation	138	14
42	Representing	127	15
12	Catalogue and Other Record Maintenance	117	16
11	Subject Headings	113	17
7	Maintaining Records	101	18
13	Classify / Catalogue Technical Reports	100	19
43	Housing	96	20

MEAN	111 16*
STANDARD DEVIATION	122 67*

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

TABLE 38
JOB-ACTIVITY ITEMS RANKING ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE BY JOB-LEVEL : DEPUTY LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
39	Directing	267	1
36	Planning	255	2
40	Coordinating	188	3
37	Organising	157	4
41	Controlling	141	5
38	Staffing	120	6
43	Housing	106	7
42	Representing	105	8
4	Selection of material, Responsible for	95	9
23	Reference Service, Responsible for	71	10
1	Scan Literature	59	11
21	Weeding Out-dated Publications	53	12
19	Stock Preservation, Responsible for	46	13
5	Ordering Books and Periodicals	40	14
25	Instructions on Information Sources	33	15
29	Editing Work	29	16
24	Compilation of Bibliographies, Responsible for	27	17
2	Prepare Abstracts	26	18
6	Procuring Books and Periodicals	25	19
27	Others	25	19

	MEAN		45.86*
	STANDARD DEVIATION		67.72*

* For all 43 job-activity items
(Top 20 Ranking Job-Activity Items)

documents and technical reports ' These have replaced the first two items from the list of the importance dimension, i e. 'Scan literature', and 'Overall responsible for selection of material', indicating that these two items in the importance dimension take much less time but are important in the overall performance of the job of assistant librarians As in other ranked lists, the 'Housing' ranks much lower, which is the last item in the list for assistant librarians in joint time-importance dimension Among the specialised library functions, the activities of the areas 'Reference', 'Cataloguing and classification', and 'Selection and acquisition' rank higher in this list also, as in the time, and the importance dimensions

In the list of top 20 job-activity items according to joint time-importance weighted score for deputy librarians (table 38), the eight administrative functions occupy the first eight positions (like the time, and the importance dimensions) In addition there are four supervisory activities from specialised library functions, again as in the time, and the importance dimensions The only difference is the supervisory activity 'Supervise binding of documents' which is missing in the list for joint time-importance dimension, but was there in both the time, as well as the importance dimensions Out of the specialised library activities (like in the time and the importance dimensions), area 'Cataloguing and classification' does not figure in the list here Among the specialised library functions, activities of the area 'Selection and acquisition', 'Reference', 'Maintenance of holdings', and the activity 'Scan literature' rank higher in the list. In the lists for three dimension 17 items are common for the deputy librarians

In general the joint time- importance dimension confirms the trends observed in the time and the importance dimensions As we move from professional assistants to higher job-levels of assistant and deputy librarians, the number of administrative functions in the list of top 20 items increases and these are placed at higher ranks in the lists, i e the administrative content of the job increases with the increase in job-level This trend also noted in the time and the importance dimensions, is again strengthened in the joint time-importance dimension

Job-Activity Items : Frequency in the Ranked Lists

In the various 19 lists of top 20 ranking job-activity items in the three dimensions of time, importance, and joint time importance, for all respondents, administrators and non-administrators, and for the three job levels of profess-

ional assistants, assistant librarians, and deputy librarians, the number of times a job-activity appears was counted. The range of appearance can potentially vary from 0 to 19. The job-activity items appearing 10 or more than 10 times have been listed below :

- Scan literature (17 times).
- Overall responsible for selection of material (10 times).
- Order and check books and periodicals etc. (19 times).
- Procure books and periodicals etc. (18 times).
- Maintain financial and other records (12 times).
- Classify and/or reclassify books, etc. (16 times).
- Catalogue books etc. (16 times).
- Maintain catalogues and other records (15 times).
- Responsible for preservation of stock (11 times).
- Supervise binding of documents (11 times).
- Responsible for the reference and information services provided (19 times).
- Responsible and/or compile bibliographies, reading list etc. (19 times).
- Instruct readers in reference methods and information sources (19 times).
- Plan and/or conduct orientation programmes for readers (13 times).
- Planning (15 times).
- Organising (16 times).
- Staffing (13 times).
- Directing (19 times).
- Coordinating (13 times).
- Controlling (14 times).
- Representing (13 times).
- Housing (12 times).

Twenty two job-activity items get a place in the 19 lists 10 or more than 10 times. There are only five activities which are common in all the lists, out of which three pertain to the area 'Reference', and the remaining two are 'Order and check books and periodicals etc.', and 'Directing'. This shows the importance of these five items in the job of professional librarians in the university. As evident, during the analysis of various lists, all the eight administrative functions find a place in the above list of items appearing 10 or more times. To be more specific all administrative functions appear 12 or more than 12 times in the 19 lists, pointing out the importance of administrative functions in the job of professional librarians in the university.

There are only two activities which do not find a place at all in the 19

ranked lists, 'Responsible and/or do translation work', and 'Responsible for printing various lists, stationary etc' The job-activity items appearing only 1 to 4 times in the 19 ranked lists are as follows

- Prepare abstracts (4 times)
- Route periodicals on request (4 times)
- Responsible and/or do editing work (3 times)

The zero frequency of the two activities and very poor frequency of the three activities in the 19 ranked lists, points out the near lack of translation services in the university libraries Abstracting services and other publication work in the university libraries, as is observed otherwise, is not common. Only a few of the professional librarians are involved in the abstracting, and publication work in the university libraries

Major Job-Functions Ranking

The table 39 presents the major functions ranking according to relative time-importance weighted score by type of position and for all respondents taken together Thus far individual job-activity items were used in all the three dimensions i e time, importance and joint time-importance dimension to process the response For the table 39, the joint time-importance weighted score for the various activities falling under a major job function were added to get the score for the major job-function This was done separately for administrators, non-administrators, and for all respondents taken together

As described in the beginning of this chapter, specialised library activities have been grouped under six major job-functions and there are eight administrative functions which have not been sub-divided into job-activities in the questionnaire These have been used for the construction of the table 39

For administrators among the specialised library functions, the first three ranks are 'Reference' followed by 'Cataloguing and classification', and 'Selection and acquisition' Among the administrative functions, the 'Directing', 'Planning', and 'Organising' have been placed at the rank 1, 2 and 3 respectively

For non-administrators among the specialised library functions, the 'Cataloguing and classification', 'Selection and acquisition', and 'Reference' have obtained the rank 1,2 and 3 respectively Among the administrative functions,

TABLE 39
MAJOR JOB-FUNCTIONS RANKING ACCORDING
TO RELATIVE TIME-IMPORTANCE WEIGHTED SCORE
BY TYPE OF POSITION

SL. NO. FUNCTIONS	ADMINISTRATORS		NON-ADMINISTRATORS		ALL TOGETHER	
	Joint Time -Importance Weighted Score	Rank	Joint Time -Importance Weighted Score	Rank	Joint Time -Importance Weighted Score	Rank
SPECIALISED LIBRARY FUNCTIONS						
1. Indexing and Abstracting	239	13	203	6	442	9
2. Selection and Acquisition	1020	4	682	2	1702	3
3. Cataloguing and Classification	1031	3	1101	1	2132	1
4. Circulation / Lending	228	15	325	· 4	553	8
5. Maintenance of Holdings	454	7	215 .	5	669	6
6. Reference	1500	1	436	3	1936	2
7. Other Activities*	241	12	62	7	303	12
ADMINISTRATIVE FUNCTIONS						
8. Planning	672	5	1	12	673	5
9. Organising	591	6	1	12	592	7
10. Staffing	299	10	0	15	299	13
11. Directing	1040	2	57	8	1097	4
12. Coordinating	431	8	3	11	434	10
13. Controlling	329	9	15	9	344	11
14. Representing	285	11	1	12	286	14
15. Housing	235	14	9	10	244	15

* Group of miscellaneous specialised activities.

for non-administrators, the 'Directing' 'Controlling', and 'Housing' have been placed at number 1, 2 and 3 respectively

When the joint time-importance weighted score for administrators and non-administrators are merged to get the score for all respondents, among the specialised library functions, the 'Cataloguing and classification', 'Reference', and 'Selection and acquisition' get the rank 1, 2 and 3 respectively Among the administrative functions, for all respondents, the 'Directing', 'Planning', and 'Organising' have obtained the rank 1, 2 and 3 respectively

Comparing ranking of major job-functions for administrators, non-administrators, and all respondents, among the specialised library functions, the first three places have been obtained by the functions 'Cataloguing and classification', 'Reference', and 'Selection and acquisition' i e these are common This points out the value attached with these three functions among specialised library functions by the professional librarians in the university

Among the administrative functions, only the function 'Directing' is common and obtained the first place for all i e administrators, non-administrators, as well as when all the respondents are taken together The 'Planning', and 'Organising' are common and rank number 2 and 3 respectively for administrators and when all respondents are taken together For non-administrators the number 2 and 3 out of administrative functions, are occupied by 'Controlling', and 'Housing' respectively

QUALITATIVE ANALYSIS OF JOB-ACTIVITIES

Quantitative consideration so far has analysed the response towards job-activity items in relation to the time, importance, and joint time-importance dimensions On the other hand, qualitative considerations are more elusive However, an attempt has been made here to analyse the qualitative response obtained from the respondents

In the questionnaire part 3, respondents have been asked two questions
i e

"Which of the activities do you feel you perform with the greatest competence?", and

"Which of the activities do you feel you perform with the least competence?'

Space was also provided with each of these two questions to indicate why they feel that they have achieved the greatest/or the least competence in the job-activity items indicated by them. The response to these questions has been analysed.

The first question i.e. about greatest competence has been replied by 85 (75.56 per cent) of the respondents, whereas the one about least competence has been answered by 40 (35.09 per cent) of the respondents only. Out of the respondents, for the question on greatest competence, 74.12 per cent are administrators and 25.88 per cent are non-administrators. In the case of respondents for the question on least competence, 62.50 per cent are administrators and 37.50 per cent are non-administrators. This shows that a greater percentage of respondents in the questions on competencies was of administrators.

Greatest Competencies

The table 40 presents the result of the response to the question on greatest competence after grouping. The specialised library function 'Reference' ranked first, followed by 'Cataloguing and classification'. The other two specialised library functions with significant score are 'Documentation', and 'Reader's services'. In the administrative functions the first rank is of 'Administration', followed by 'Public relations', 'Personnel management' and 'Planning'. The score for the greatest competence are given on next page.

In the quantitative analysis of job-activity items, a lot of preference has been found for administrative functions, but in the list of greatest competencies administrative functions have not scored much. From the large number of professional librarians working in administrative positions (62.28 per cent of the sample), and from the ranking obtained in the 19 lists of ranked job-activity items (in the time, importance and time-importance dimensions), it has been inferred that administrative activities contribute in large measure in the job performed by professional librarians, still the score for greatest competence of administrative functions is not higher. This shows that a greater educational need exists in the area of administrative functions among professional librarians in the university.?

Library automation has obtained the last rank in the specialised library functions for greatest competencies. The reasons can be that university librarians are still making efforts in implementing library automation programmes. Again taking into consideration, the plans of the University

TABLE 40
PERCENTAGE SCORE FOR GREATEST COMPETENCIES

AREA/ACTIVITY	%
SPECIALISED LIBRARY FUNCTIONS	
REFERENCE	29 27
CATALOGUING & CLASSIFICATION	20 33
DOCUMENTATION	13 00
READERS' SERVICES	10 57
SELECTION & ACQUISITION	7.32
CIRCULATION	2 44
LIBRARY AUTOMATION	1 63
PERCENTAGE OF RESPONSE	84 56
ADMINISTRATIVE FUNCTIONS	
ADMINISTRATION	8 94
PUBLIC RELATIONS	3.25
PERSONNEL MANAGEMENT	2 44
PLANNING	0 81
PERCENTAGE OF RESPONSE	15 44

Grants Commission to establish network of libraries in the country (INFLIBNET) and other local area networks in larger cities, like Delhi, Calcutta, etc , there is a greater need for education in library automation for professional librarians in the university

Least Competencies

The table 41 provides the result of grouping the response to the question on least competence Out of the specialised library functions, 'Cataloguing and classification' was ranked first It was followed by 'Library automation', 'Library routines', 'Selection and acquisition', and 'Circulation'

In the administrative functions 'Administration' is placed at number one 'Personnel management' and 'Planning' just manage to enter the list with

TABLE 41
PERCENTAGE SCORE FOR LEAST COMPETENCIE!

AREA/ACTIVITY	%
SPECIALISED LIBRARY FUNCTIONS	
CATALOGUING & CLASSIFICATION	27.!
LIBRARY AUTOMATION	18.(
LIBRARY ROUTINES	11.(
SELECTION & ACQUISITION	11.(
CIRCULATION	6.!
PERCENTAGE OF RESPONSE	76.'
ADMINISTRATIVE FUNCTIONS	
ADMINISTRATION	18.(
PERSONNEL MANAGEMENT	2.!
PLANNING	2.!
PERCENTAGE OF RESPONSE	23.!

2.33 per cent response.

In the score for least competencies 23.26 per cent of the resp(
administrative functions, which is higher when compared with th
greatest competencies (15.54 per cent). This again confirms tl
observation of greater educational need of professional libr;
administrative functions of the library. 'Library automation' scores (
among the specialised library functions in the list for least compete
18.60 per cent of the response) as compared to (only 1.63 per cent) in
greatest competencies. This indicates a greater need for education
automation for professional librarians, and confirms the observation m;
in the analysis of greatest competencies.

Reasons for Competencies

The study of reasons stated by respondents for greatest
competencies show possession of experience or the lack of it; inter

area or the lack of interest, having good training, knowledge, background in the subject etc or the lack of training, knowledge, background etc as major reasons A number of respondents have stated no reasons for the competence or the lack of competence In this category there are six persons (15 per cent of the respondents) in the least competencies, and six persons (7 06 per cent of the respondents) in the greatest competencies The percentage of various reasons for the greatest competencies is given in table 42

TABLE 42
REASONS FOR HAVING GREATEST COMPETENCIES

REASONS	RESPONSE PERCENTAGE
INTEREST & SATISFACTION	41 94
EXPERIENCE	27 96
TRAINING	21 51
APTITUDE & INVOLVEMENT	8 60

The most frequent reason for greatest competencies stated by the respondents is their 'interest and/or satisfaction', followed by the reason 'experience', and 'training'. Some of the statements of reasons in the later two i e experience and training have been reproduced below

- Experience of having worked in these sections for a long
- Because of my experience with the top administrators
- Practical experience in this area as well as intensive studies
- Doing the indexing work, it has become easy to retrieve information [and] I keep myself informed through various documents
- Because of the best training which I had
- I can use my academic and technical skills in the job
- Because of my training in the library school

The percentage of various reasons for the least competencies is given in table 43

The most stated reason for least competencies is the 'lack of experience, followed by the reasons 'lack of interest,' and 'lack of training' A few statements of the respondents giving reasons as 'lack of experience' and/or the 'lack of training' are

TABLE 43
REASONS FOR HAVING LEAST COMPETENCIES ·

REASONS	RESPONSE PERCENTAGE
LACK OF EXPERIENCE	39.47
LACK OF INTEREST	26.32
LACK OF TRAINING	18.42
WORK OF NON PROFESSIONAL NATURE	7.89
PROBLEMS IN LIBRARY SYSTEM	7.89

- Because it was never my assignment so far.
- No opportunity was provided to handle that section.
- The library schools do not give any chance to develop in the area.
- I am not competent.
- I do not have formal training for this area.
- Lack of practical training.

Chief reasons, both for greatest as well as least competencies constitute to be the experience, interest, and training. Experience on the job or the lack of it, obtained response of 27.96 per cent respondents for greatest competencies and 39.47 per cent for least competencies. Probably less or lack of frequent job rotation among professional librarians is responsible for this reason. This indicates the need for 'on the job training', as well as need for job rotation among professional librarians in the university library.

Interest or the lack of it, obtained 41.94 per cent response for greatest competencies and 26.32 per cent for least competencies. If we consider the reason 'work of non-professional nature' given in the reasons for least competencies, as constituting to be a part of the reason 'lack of interest', than the later reason will show a response of 34.21 per cent for least competencies. Also there is every likelihood that a number of respondents, giving reason as 'lack of interest' for least competencies, are stating this reason due to performing activities of a lower level or non-professional nature in the library. 'Library routines' attracted 11.63 per cent response for least competencies, which again is a pointer towards job of professional librarians involving work of a lower level or of non-professional nature, or the lack of necessary motivation.

Training expressed as qualification, knowledge etc (including the lack of training) is another important reason, attracting 21 51 per cent response for greatest competencies and 18 42 per cent response for least competencies It is interesting to note that for library automation, both in greatest competencies as well as least competencies, the reasons stated by the respondents pertains to library training (including on the job training as well as formal training in library schools)

5

Demand for Courses and Other Data on Educational Needs

So far, the job-activities performed and the competencies expressed by the professional librarians from the sample universities, have been analysed to infer their educational needs A part of the questionnaire in addition solicited response to find out about the educational needs of the respondents in terms of their demand for courses and their interests in further education

After qualifying to work in the profession, it is more as a matter of choice and interest that a professional librarian would like to opt for educational programmes As stated earlier the post PG level programme, i e M Phil in LIS has not become very popular among the professional librarians Therefore, it is all the more essential to know about the educational needs, choice, and interest of the professional librarians, before new programmes are offered As a result it would also be possible to revise the existing educational programmes to make these more helpful to the profession The results from this analysis can bring out the areas which could be offered as continuing education programmes for professional librarians to fulfill their educational needs, so that they become competent to perform the job activities Such an approach will be helpful in fulfilling the educational needs of the professional librarians and it would meet on-the-job educational needs in the profession

Part 2 of the questionnaire Your educational needs' has been designed to obtain the information on the educational needs of the professional librarians It aims to find out their educational needs in LIS and related scientific, technical,

professional and other subject areas, their views about LIS training in library schools, etc. The response has been grouped and analysed under the following heads :

- Demand for courses in LIS;
- Types of courses professional librarians would like to undertake;
- Demand for training in other subject areas;
- Demand for advanced courses in LIS;
- Scientific, technical and professional courses or course areas (other than LIS) which could be helpful to the professional librarians in libraries;
- Job-activities in libraries for which library school training has not prepared;
- Expectations of professional librarians from library school;
- Courses attended by professional librarians during library service; and
- Suggestions of the professional librarians for courses and curricula.

Demand for Courses in LIS

The respondents were asked: 'To upgrade and update your present knowledge, would you feel interested in undertaking some training in different area of librarianship?' The response in affirmation was overwhelming as 89.47 per cent of the total respondents (i.e. 102 out of 114) are inclined to undertake training programmes.

TABLE 44
INTEREST EXPRESSED IN LIS COURSES
BY POSITION & JOB - LEVEL

POSITIONS	ADMINISTRATORS			NON-ADMINISTRATORS			ALL POSITIONS		
JOB-LEVEL AGE GROUP	W/S REG NUMBER		SHORT	W/S REG NUMBER		SHORT	W/S REG NUMBER		SHORT
PROF. ASSTT.									
<31	0	0	0	0	2	0	0	2	0
31-40	2	2	0	5	1	4	7	3	4
41-50	4	1	2	13	1.	6	17	2	8
>50	1	0	2	4	1	0	5	1	2
SUB TOTAL	7 +	3 +	4	22 +	5 +	10	29 +	8 +	14=51

ASSTT. LIBN.

<31	0	1	0	0	0	0	0	1	0
31-40	3	1	5	0	0	0	3	1	5
41-50	6	1	7	0	0	0	6	1	7
>50	4	1	5	0	0	0	4	1	5
SUB-TOTAL	13 +	4 +	17	0	0	0	13 +	4 +	17=34

DY. LIBN.

<31	0	0	0	0	0	0	0	0	0
31-40	0	0	1	0	0	0	0	0	1
41-50	3	0	1	0	0	0	3	0	1
>50	7	1	4	0	0	0	7	1	4
SUB-TOTAL	10 +	1 +	6	0	0	0	10 +	1 +	6=17
TOTAL	30 +	8 +	27	22 +	5 +	10	52 +	13 +	37 = 102

ALL LEVELS

<31	0	1	0	0	2	0	0	3	0
31-40	5	3	6	5	1	4	10	4	10
41-50	13	2	10	13	1	6	26	3	16
>50	12	2	11	4	1	0	16	3	11

* 8 RESPONDENTS GAVE RESPONSE AS "NO".
4 RESPONDENTS DID NOT RESPOND TO THE RELEVANT QUESTION.
** W/S = WORKSHOPS/SEMINAR, REG = REGULAR COURSES, SHORT = INTENSIVE SHORT TERM COURSES

The table 44 presents the data regarding interest expressed in training in LIS by job-level and position. Within each job-level and position the frequency distribution has been done in four age groups as follows :

1. Age up to 30 years, 2. From 31 to 40 years,
3. From 41 to 50 years, and 4. Above 50 years.

The data has been further sub-grouped to show interest of the professional librarians in undertaking workshops/seminars, regular courses, or intensive short term courses. The table 45 presents the data on interest in LIS training by position and job-levels. Out of the respondents saying 'yes' for training, 63.73 per cent are professional librarians in administrative position, and 36.27 per cent in non-administrative position. Out of the total administrators, 91.55 per cent, and out of the total non-administrators, 86.05 per cent have expressed inclination for undergoing training in LIS, i.e. 8.45 per cent administrators, and 13.95 per cent non-administrators are not interested in LIS training. This shows that relatively more number of administrative professional librarians are interested in training in LIS.

TABLE 45
INTEREST IN LIS COURSES BY POSITION & JOB - LEVEL
PERCENTAGE DISTRIBUTION
OF RESPONDENTS IN THE STUDY

POSITION/ JOB-LEVEL	WORKSHOP	REGULAR	SHORT	TOTAL
ADMIN.	29.41	7.84	26.47	63.73
NON-ADMIN.	21.57	4.90	9.80	36.27
SUB TOTAL	50.98	12.74	36.27	100.00
PROF.ASST.	28.43	7.84	13.73	50.00
ASSTT.LIBN.	12.75	3.92	16.67	33.33
DY.LIBN.	9.80	0.98	5.88	16.67
SUB TOTAL	50.98	12.74	36.28	100.00

Out of the respondents interested in LIS training, 50.00 per cent are professional assistants, 33.33 per cent are assistant librarians, and 16.67 per cent are deputy librarians. Considering this expression of interest in terms of percentage of respondents population by job-level, 85.00 per cent of professional

assistants, 94 44 per cent of assistant and deputy librarians have expressed their interest in LIS training This shows that a larger percentage of assistant and deputy librarians are interested in LIS training as compared with professional assistants

As stated above 63 73 per cent of those interested are in administrative position, and the remaining 36 27 per cent are in non-administrative position Out of the professional assistants showing interest in LIS training, 27 45 per cent are in administrative position. Out of the assistant and deputy librarians who have shown interest in LIS training all are administrators (there is no non-administrative deputy librarian in the population) As out of the total population of professional assistants 30 00 per cent are in administrative position, the frequency of interest in LIS training is not very different (27 45 per cent of the interested professional assistants) The same is true of the non-administrative professional assistants who constitute 70 00 per cent of the total population of the professional assistants However, in the response, proportion of non-administrative professional assistants is more as compared with those in the administrative position, as in the actual response, those in non-administrative position are more than two times in number i e. 72 55 per cent (as compared with those in administrative positions who constitute 27 45 per cent only) The expression of interest in LIS training has been analysed by variable age vis-a-vis job-levels and positions Out of administrators the response by age groups is

1	Age up to 30 years	1 54 per cent,
2.	From 31 to 40 years	21 54 per cent
3	From 41 to 50 years	38 46 per cent, and
4	Above 50 years	38 46 per cent.

This constitutes maximum administrators in the age group 41 to 50 years and above 50 years (38 46 per cent each), followed by 21 54 per cent in the age group of 31 to 40 years, and the least 1 54 per cent in the age group up to 30 years Comparing it with the number of administrative respondents in the four age groups, 2 in the age group 41 to 50 years and 4 in the age group above 50 years have expressed no' interest in LIS training Thus 7 41 per cent and 13 8 per cent of population of administrators, in the above two age groups respectively, are not interested in LIS training As inferred some of the administrators after the age of 40 years do not feel interested in LIS training

Out of non-administrators the interest in LIS training is as follows :

1. Age up to 30 years   :   5.41 per cent,
2. From 31 to 40 years   :   27.03 per cent,
3. From 41 to 50 years   :   54.05 per cent, and
4. Above 50 years   :   13.51 per cent.

This constitutes maximum non-administrators (i.e. 54.05 per cent), in the age group 41 to 50 years, followed by age group 31 to 40 years (27.03 per cent), age group above 50 years (13.51 per cent), and least in the age group up to 30 years (i.e. 5.41 per cent). Comparing it with the number of non-administrative respondents in the population, 5 persons in the age group 41 to 50 years, and one person in the age group more than 50 years expressed 'no' interest in LIS training. This shows that 20 per cent, and 16.67 per cent of the respondents population of non-administrators, in the above two age groups respectively, are not interested in LIS training. Inferring from this some of the non-administrators, after the age of 40, do not feel interested in LIS training. This observation is similar to that observed among administrators. As observed all the non-administrators up to the age of 40 remain interested in LIS training, after which the interest decreases.

The expression of interest in LIS training among respondents of various job-levels has been analysed vis-a-vis age of the respondents. Out of professional assistants, the distribution of interest in LIS training is as follows:

1. Age up to 30 years   :   3.92 per cent,
2. From 31 to 40 years   :   27.45 per cent,
3. From 41 to 50 years   :   52.94 per cent, and
4. Above 50 years   :   15.69 per cent.

The response constitutes maximum number of professional assistants in the age group of 41-50 years (i.e. 52.94 per cent), followed by the age group 31 to 40 years (27.45 per cent), above 50 years (15.69 per cent), and the least in the age group up to 30 years (3.92 per cent). When compared with the number of professional assistants in the population, 6 persons in the age group of 41 to 50 years, and 3 in the age group above 50 years did not show interest in LIS training. This shows that 18.18 per cent and 27.27 per cent of the professional assistants, in the above two age groups respectively, are not interested in LIS training. This is in conformity with the observation made in the groups of administrators and non-administrators. Among the professional assistants after

the age of 40, interest in undergoing LIS training decreases

For the assistant librarians, the distribution of interest in LIS training by age groups is given below

1	Age up to 30 years	2 94 per cent,
2	From 31 to 40 years	26 47 per cent,
3	From 41 to 50 years	41 18 per cent, and
4	Above 50 years	29 41 per cent

This constitutes maximum of assistant librarians in the age group of 41 to 50 years (i e 41 18 per cent), followed by the age group above 50 years (29 41 per cent), from 31 to 40 years (26 47 per cent), and the least in the age group up to 30 years (2 94 per cent) Comparing it with the assistant librarians in the total population, one assistant librarian each in the age group 41 to 50 years and above 50 years did not show interest in LIS training These constitute 6 67 per cent and 9 1 per cent of the population in the above two age groups respectively Again like administrators, non-administrators and professional assistants, it has been observed that some of the assistant librarians after the age of 40 are not interested in LIS training

Among the deputy librarians, the distribution of interest in LIS training by age groups is as follows

1	Age up to 30 years	Not applicable,
2	From 31 to 40 years	5 88 per cent,
3	From 41 to 50 years	23 53 per cent, and
4	Above 50 years	70 59 per cent

This constitutes maximum of deputy librarians in the age group above 50 years (i e 70 59 per cent), followed by the age group 41 to 50 years (23 53 per cent) and the least in the age group 31 to 40 years (5 88 per cent) There is no deputy librarian in the age group up to 30 years Comparing it with the deputy librarians in the total respondents in the study, one deputy librarian in the age group above 50 years did not show interest in training in LIS (i e 7 69 per cent of the deputy librarians in this age group) Therefore, like in other job-levels, deputy librarians in the higher age start loosing interest in LIS training

So, taking into consideration the response to LIS training it can be concluded that in all job-levels and positions, with the increase in the age, some of the professional librarians start loosing interest in LIS training All professional librarians, below the age of 40 years, are interested in LIS training,

wno constitute 23.68 per cent of the total respondents in the study. Maximum concentration of respondents, willingness for LIS training is in the age group 41 to 50 years i.e. 39.47 per cent of the respondents in the study.

The table 46 presents the interest of professional librarians by position and job-level, displaying interest in terms of percentage of the interested professional librarians in each group for workshops/seminars, regular courses, and intensive short-term courses. The table 44 gave in detail the interest of various age groups within each position and job-level for workshops/seminars, regular courses and intensive short term courses giving number of respondents.

TABLE 46
INTERST IN LIS COURSES BY POSITION AND JOB-LEVEL

COURSES	ADMIN. N = 71	NON-ADMIN N = 43	P.ASSTT. N = 60	A.LIBN. N = 36	DY.LIBN. N = 18	TOTAL N = 114
WORKSHOP	42.25	51.16	48.33	36.11	55.56	45.61
REGULAR	11.27	11.63	13.33	11.11	5.56	11.40
SHORT TERM	38.03	23.26	23.33	47.22	33.33	32.46
N0 RES.	8.45	13.95	15.00	5.56	5.56	10.53
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00

Out of the administrators, maximum (i.e. 42.25 per cent) are interested in workshops/seminars, followed by intensive short term courses (38.03 per cent) and regular courses (11.27 per cent). Administrators not responding or showing no interest in LIS training are 8.45 per cent.

Among the non-administrators, maximum number (i.e. 51.16 per cent) are interested in workshops/seminars, followed by 23.26 per cent in intensive short-term courses, and 11.63 per cent in regular courses for LIS training. Non-administrators not responding or showing no interest are 13.95 per cent. The distribution is similar to administrators as order of preference for types of courses is workshops/seminars, followed by intensive short term courses, and the least regular courses.

Out of the professional assistants, maximum number (48 33 per cent) have opted workshops/seminars, followed by intensive short term courses (23 33 per cent) and regular courses (13 33 per cent) The professional assistants not responding or showing no interest in LIS training are 15 00 per cent The pattern of interest distribution in various type of courses is the same as observed in administrators, as well as non-administrators

Among the assistant librarians, the distribution of interest in types of courses for LIS training is different to some extent. The maximum number (47 22 per cent) are interested in intensive short term courses, followed by 36 11 per cent in workshops/seminars, and 11 11 per cent in regular courses The assistant librarians showing no interest in LIS training are 5 56 per cent only Comparing the interest of the assistant librarians, with the administrators, non-administrators, and professional assistants, it is observed that the first preference here is for intensive short term courses and the second preference is for workshops/seminars This is reverse in the administrators, non-administrators, and professional assistants

Among the deputy librarians, 55 56 per cent have opted for workshops/seminars, followed by 33 33 per cent in intensive short term courses and only 5 56 per cent opted regular courses Only 5 56 per cent of the deputy librarians (like assistant librarians) have not responded or expressed lack of interest in LIS training

Except for the assistant librarians, in all groups maximum interest has been expressed in the workshops/seminars, followed by intensive short term courses, and the least in regular courses This pattern also holds good for all respondents, which is maximum (45 61 per cent for workshops/seminars, followed by 32 46 per cent for intensive short term courses, and the least for regular courses (11 40 per cent)

As evident in table 46 interest for LIS training through workshops/seminars is highest among the deputy librarians, followed by the non-administrators, professional assistants, administrators and the assistant librarians respectively For intensive short term courses, it is highest among the assistant librarians, followed by administrators, deputy librarians, professional assistants and non-administrators For regular courses which is least preferred by all groups, it is maximum among the professional assistants, followed by the non-administrators, administrators, assistant librarians, and the deputy librarians respectively Thus programmes of smaller duration will be more popular

and suitable for providing LIS training among professional librarians in the universities i.e. workshops/seminars or intensive short term courses. The regular courses are least preferred as a means of further education in LIS. Lack of interest in further LIS training is maximum among the professional assistants, followed by the groups non-administrators, administrators, and assistant and deputy librarians.

The response regarding interest in undertaking LIS training courses has also been analysed according to age group of the respondents. The four age groups (i.e. age up to 30, age 31 to 40, age 41 to 50, and age above 50 years) have been used to study the interest in undertaking workshops/seminars, regular courses, and intensive short term courses. The distribution of interest is shown in the table 47.

TABLE 47
INTEREST IN UNDERTAKING LIS COURSES BY AGE

AGE GROUP	WORKSHOPS/ SEMINARS		REGULAR COURSES		SHORT TERM COURSES		ALL TYPES	
	NO.	%	NO.	%	NO.	%	NO.	%
<31	0	0.00	3	2.63	0	0.00	3	2.63
31-40	10	8.77	4	3.51	10	8.77	24	21.05
41-50	26	22.87	3	2.63	16	14.04	45	39.47
>50	16	14.04	3	2.63	11	9.65	30	27.19
ALL AGES	52	45.61	13	11.40	37	32.46	102	89.47

* Percentages are in terms of total respondents in the study.

The distribution of interest by age groups is maximum (i.e. 39.47 per cent) for the age group 41 to 50 years, followed by 27.19 per cent for above 50 years, 21.05 per cent for 31 to 40 years, and least 2.63 per cent for up to 30 years (where percentage reflect parts of the total response).

The preference for workshops/seminars is maximum with the age group 41 to 50 years i.e. 22.87 per cent, followed by 14.04 per cent for above 50 years, and 8.77 per cent for 31 to 40 years. Of all age groups preference for workshops/

seminars is of 45 61 per cent, the maximum among the three types of courses

The next preference is for intensive short term courses which is 32 46 per cent for all age groups taken together Out of this highest response is again of the age group 41 to 50 years (i e 14 04 per cent), followed by 9 65 per cent of above 50 years, and 8 77 per cent of 31 to 40 years

The least preference is for the regular courses in LIS, which has attracted only 11 40 per cent of the respondents in the study However, the maximum response out of it is of the age group 31 to 40 years i e 3 51 per cent, followed by the remaining three age groups sharing 2 63 per cent response each As evident the younger persons feel more attracted, for regular courses

Except for regular courses, maximum interest for LIS training courses is among the age group 41 to 50 years, followed by the age group above 50 years, 31 to 40 years, and below 31 years respectively The observation here is obvious as the average age of respondents is above 45 years, and the average varies below 50 years for job-levels, except for deputy librarians

The analysis of response in respect of types of courses shows that the professional librarians in the university prefer to undertake LIS training courses of shorter duration i e the workshops/seminars, followed by the intensive short term courses, as these two have been preferred by 78 07 per cent of the respondents in the study, (or 87 25 per cent of the respondents interested in undertaking further LIS training)

The respondents were asked to state area/areas of their interest for undertaking LIS training Very often the individual respondents has given more than one area of interest The interest stated in this manner has been analysed The responses* have been grouped and are as follows

Library Automation and Information Technology : In all 40 (25 81 per cent of response)

| Library Automation | 34 |
| Information Technology | 6 |

Library Administration and Management : In all 39 (25 16 per cent of response)

| Library Administration & Management | 13 |

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* In all 155 areas are there in the ungrouped data The percentage in the grouped data use this as the total response as this is larger than the number of respondents to this question

Personnel Management	17
Public Relation & Communication	5
Library Finance	1
Periodicals Management	2
Catalogue Deptt. Management	1

Library Techniques : In all 36 (23.23 per cent of response).

Library Techniques	2
Library Acquisition	4
Library Circulation	1
Documentation	2
Cataloguing & Classification	11
Information Storage & Retrieval	2
Indexing	9
Abstracting	4
Thesaurus	1

Library Services : In all 34   (21.94 per cent of response).

Reference Service	21
Current Awareness Service	12
Readers' Services	1

Other Areas : In all 6 (3.87 per cent of response).

Music Library	1
Library for blind	1
Library Association	1
Library Profession	1
Library Standards	1
Continuing Education	1

The 'Library automation and information technology' is the largest interest area attracting in all 40 respondents. The second largest area with 39 respondents opting for it is 'Library administration and management', followed by 'Library techniques and routine' 36 respondents, `Library services' 34 respondents, and 'other areas' six respondents.

'Library automation' alone received 34 responses, the highest among specific areas stated by the respondents. This was followed by 'Reference service' with 21 respondents, `Personnel management' with 17, 'Library administration and management' with 13, `Current awareness services' with 12,

'Cataloguing and classification' with 11 respondents, as major LIS areas for further training

Though in the sample libraries automation is in the initial stages and out of the population only a few persons are involved in this work, but the demand for LIS courses has given 'Library automation and information technology' the top position The reason probably is that professional librarians are now aware of the importance of library automation They are confident of the increasing role of libraries and thus want to be equipped* The 'Library administration and management', and 'Reference service' too have been choice of a large number of professional librarians This is in conformity with the quantitative analysis (in chapter 4) of job-activities In general it can be concluded that the demand for courses in LIS is consistent with the results of quantitative analysis of job-activities

Comparing the result of demand for courses in LIS, with the result of least competencies in the chapter 4, a close resemblance is observed Among the specialised library functions the first two positions with highest response, was 'Cataloguing and classification', and 'Library automation' In demand for LIS courses again, the first two areas among specialised library functions are 1 Library automation and information technology (25 81 per cent of response), and 2 Library techniques (23 23 per cent of response) Similarly among library administration and management functions in the least competencies, the highest response was for 'Library administration', and 'Personnel management' In the demand for LIS courses too, the first two areas are 1 Personnel management (10 97 per cent of response), and 2 Library administration & management (8 39 per cent of response)

Demand for Training in Other Subject Areas

The respondents were asked "Would you enroll for a course in some other subject area? If yes, what area or discipline?" The response in affirmation was from 52 63 per cent of the total respondents in the study (i e 60 out of 114 respondents)

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* During discussion with a number of professional librarians they expressed the view that if librarians do not get involved and if they are not equipped with the knowledge of library automation this work might be taken over by members of other professions

The table 48 presents the data regarding interest expressed in training in other subject areas. The distribution of response has been done within each job-position and job-level in four age groups as follows:

1.   Age up to 30 years,   2.   From 31 to 40 years,
3.   From 41 to 50 years, and   4.   Above 50 years.

Out of the respondents saying 'yes' for training, 66.67 per cent are professional librarians in administrative position, and 33.33 per cent in non-administrative position. The percentage distribution is similar to that for interest in LIS training, where administrators constituted 63.73 per cent and non-administrators 36.27 per cent. Out of the total administrators in the study 56.34 per cent, and non-administrators 46.51 per cent are inclined to have training in other subject areas. The interest for training in other subject areas is less than interest in LIS training where it was 91.55 and 86.05 per cent for administrators and non-administrators in the study respectively. In other subject areas also a larger percentage of administrators are interested in training than non-administrators.

TABLE 48
INTEREST EXPRESSED IN OTHER SUBJECT AREA

POSITIONS	ADMINISTRATORS	NON-ADMINISTRATORS NUMBER	ALL POSITIONS NUMBER
PROF.ASSTT.			
<31	0	2	2
31 - 40	1	5	6
41 - 50	4	11	15
>50	0	2	2
SUB TOTAL	5 N = 18	20 N = 42	25 N = 60
ASSTT. LIBN.			
<31	1	0	1
31 - 40	7	0	7
41 - 50	9	0	9

>50	7	0	7

SUB-TOTAL	24 N = 35	0 N = 01	24 N = 36

DYLIBN

<31	0	0	0
31 - 40	0	0	0
41 - 50	2	0	2
>50	9	0	9

SUB-TOTAL	11 N = 18	0 N = 00	11 N = 18

TOTAL	40 N = 71	20 N = 43	60 N = 114

ALLLEVELS

<31	1	2	3
31 - 40	8	5	13
41 - 50	15	11	26
>50	16	2	18

* 39 RESPONDENTS GAVE RESPONSE AS "NO"
  15 RESPONDENTS DID NOT RESPOND TO THE RELEVANT QUESTION

Out of the respondents interested in training in other subject areas 41 67 per cent are professional assistants, 40 00 per cent are assistant librarians, and 18 33 per cent are deputy librarians Considering this interest in terms of percentage of respondent population by job-level, 41 67 per cent of professional assistants, 66 67 per cent of assistant librarians, and 61 11 per cent of deputy | librarians have expressed interest in training in other subject areas Like interest in LIS training, a larger percentage of assistant and deputy librarians are interested in training in other subject areas as compared with professional assistants However, the interest is less in each job-level as compared with interest of each job-level in training in LIS

Out of the professional assistants interested in training in other subject areas, 20 00 per cent are in administrative positions, and 80 00 per cent are in non-administrative positions This percentage of administrative professional

assistants is lesser than the percentage of professional assistants interested in LIS training (where it was 27.45 per cent). All the respondent assistant and deputy librarians who have shown interest in training in other subject areas are administrators. (However, there is no non-administrative deputy librarian in the population). The percentage of administrative professional assistants interested in training in other subject areas (i.e. 20.00 per cent) is lesser than the concentration of administrative professional assistants in the study, which is 30.00 per cent. Obviously the non-administrative professional assistants are more represented than their concentration in the total population, as 80.00 per cent of them are interested (as compared with 70.00 per cent in the population). However, the proportion of non-administrative professional assistants is four times the administrative professional assistants, showing interest in training in other subject areas. This was less than three times in the analysis for those interested in LIS training.

TABLE 49
INTEREST IN OTHER SUBJECT AREAS BY AGE GROUP
PERCENTAGE OF RESPONDENTS

POSITION/ JOB-LEVEL		AGE GROUPS < 31	31 - 40	TOTAL 41 - 50	> 50	TOTAL
ADMIN.	NO	1	8	15	16	40
	%	2.50	20.00	37.50	40.00	100.00
NON- ADMIN.	NO	2	5	11	2	20
	%	10.00	25.00	55.00	10.00	100.00
PROF. ASSTT.	NO	2	6	15	2	25
	%	8.00	24.00	60.00	8.00	100.00
ASSTT. LIBN.	NO	1	7	9	7	24
	%	4.17	29.17	37.50	29.17	100.00
DY.LIBN.	NO	0	0	2	9	11
	%	0.00	0.00	18.18	81.82	100.00
ALL	NO	3	13	26	18	60
	%	5.00	21.67	43.33	30.00	100.00

The expression of interest in training in other subject areas has been analysed by the variable age vis-a-vis position and job-level. The result of this

analysis has been presented in the table 49

Administrators interested in other subject areas in various age groups are

1	Age up to 30 years	2 50 per cent,
2	From 31 to 40 years	20 00 per cent,
3	From 41 to 50 years	37 50 per cent, and
4	Above 50 years	40 00 per cent

This constitutes maximum administrators in the age group above 50 years 40 00 per cent, followed by 37 50 per cent in the age group 41 to 50 years, 20 00 per cent in the age group 31 to 40 years, and the least 2 50 per cent in the age group up to 30 years The distribution is very close to that for interest in LIS training Comparing it with the number of actual respondents in the four age groups, 6 in the age group 31 to 40, 12 in the age group 41 to 50, and 13 in the age group above 50 years expressed no interest in training in other subject areas Thus 42 86 per cent, 44 44 per cent, and 44 83 per cent of population of administrators in the above three age groups respectively, are not interested in training in other subject area

Out of the non-administrators, the interest in training in other subject areas is as follows

1	Age up to 30 years	10 00 per cent,
2	From 31 to 40 years	25 00 per cent,
3	From 41 to 50 years	55 00 per cent, and
4	Above 50 years	10 00 per cent

This constitutes maximum non-administrators (55 00 per cent) in the age group 41 to 50 years, followed by the age group 31 to 40 years (25 00 per cent), and the remaining two age groups sharing 10 00 per cent each The distribution is similar to that for interest in LIS training Comparing it with the number of non-administrative respondents in the population, 5 persons in the age group 31 to 40 years, 14 in the age group 41 to 50 years, and 4 in the age group above 50 years have not shown interest in training in other subject areas Thus 50 00 per cent, 56 00 per cent, and 66 67 per cent non-administrators in the above three age groups respectively, are not interested in training in other subject areas In comparison to administrators, a larger percentage of non-administrators are not interested in training in other subject areas

Out of the professional assistants, the distribution of interest in training in other subject areas is as follows :

1. Age up to 30 years   :   8.00 per cent,
2. From 31 to 40 years   :   24.00 per cent,
3. From 41 to 50 years   :   60.00 per cent, and
4. Above 50 years   :   8.00 per cent

The response constitutes maximum number of professional assistants in the age group 41 to 50 years (i.e. 60.00 per cent), followed by 24.00 per cent in the age group 31 to 40 years, and 8.00 per cent each in the remaining two age groups. When compared with the number of professional assistants in the population, 8 persons in the age group 31 to 40 years, 18 persons in the age group 41 to 50 years, and 9 persons in the age group above 50 years have not shown interest in training in other subject areas. This shows that 57.14 per cent, 54.55 per cent, and 81.82 per cent of the professional assistants respectively, in the above three age groups are not interested in training in other subject areas. The percentage of professional assistants not interested in training in other subject areas is higher as compared to the groups of administrators and non-administrators.

For the respondent assistant librarians, the distribution of interest in training in other subject areas is given below :

1. Age up to 30 years   :   4.17 per cent,
2. From 31 to 40 years   :   29.17 per cent,
3. From 41 to 50 years   :   37.50 per cent, and
4. Above 50 years   :   29.17 per cent.

The response constitutes maximum number of assistant librarians in the age group 41 to 50 years (i.e. 37.50 per cent), followed by the two age groups 31 to 40 years and above 50 years, each with 29.17 per cent, and the least from the age group up to 30 years i.e. 4.17 per cent. Comparing it with the number of assistant librarians in the total respondents of the study, 2 persons in the age group 31 to 40 years, 6 persons in the age group 41 to 50 years, and 4 persons in the age group above 50 years did not show interest in training in other subject areas. Thus 22.22 per cent, 40.00 per cent, and 36.36 per cent of the assistant librarians in the above three age groups respectively, do not feel inclined to undertake training in other subject areas. The percentage of assistant librarians not interested in training in other subject areas is lesser than the groups of administrators, non-administrators, and professional assistants.

Among the deputy librarians, the distribution of interest in undertaking training in other subject areas by age groups is as follows

1	Age up to 30 years	Not applicable,
2	From 31 to 40 years	0 00 per cent,
3	From 41 to 50 years	18 18 per cent, and
4	Above 50 years	81 82 per cent

This constitutes maximum number of deputy librarians in the age group above 50 years (i e 81 82 percent), followed by 18 18 per cent in the age group 41 to 50 years There was none interested from the age group 31 to 40 years When compared with the number of respondents in the population of deputy librarians in the study in various age groups, one person in the age group 31 to 40 years, 2 persons in the age group 41 to 50 years, and 4 person, in the age group above 50 years have not shown interest in training in other subject areas Thus 100 00 per cent, 50 00 per cent, and 30 77 per cent deputy librarians in the above three age groups respectively have not shown interest in training in other subject areas

Taking into consideration the response to undertake training in other subject areas the distribution of interest in job-positions and job-levels is as follows in various age groups

S No.	Age	Maximum Interest	Minimum Interest
1	Up to 30 years	All equal	All equal
2	From 31 to 40 years	Assistant Librarians	Deputy Librarians
3	From 41 to 50 years	Assistant Librarians	Non - Administrators
4	Above 50 years	Deputy Librarians	Professional Assistants

Invariably in all positions and job-levels the interest in undertaking further training in other subject areas is lesser than interest in undertaking training in LIS Observing the interest in undertaking further training in other subject areas by job positions the interest decreases with the increase in age By job levels in general the interest decreases in the professional assistants

but increases among the assistant and deputy librarians.

The respondents were asked to state areas of their interest in undertaking courses in other subject areas. The response stating interest in various areas has been analysed after grouping. The result of grouped response is as follows :

Automation and Information Technology : In all 18 (30.00 per cent of responses).

Computer Application	:	13
Information Technology	:	3
Database & Software	:	1
Automatic Indexing	:	1

Administration and Management : In all 16 (26.67 per cent of response).

Management	:	9
Communication	:	4
Public Relations	:	1
Information Management	:	1
Public Administration	:	1

Linguistics and Literature : In all 7 (11.67 per cent of response).
Other Areas : In all 19 (31.67 per cent of response).

Audio-Visual Methods	:	1
Buddhist Studies	:	1
Classical Music	:	1
Classification	:	1
Energy	:	1
Environment	:	1
History	:	1
Indian Economics	:	1
Information Needs	:	1
International Relations	:	1
Journalism	:	1
Law	:	3
Pollution	:	1
Preservation	:	1
Psychology	:	1
Sciences	:	1
Social Sciences	:	1

The grouping of the interest in other subject areas stated in the response, revealed that 30 00 per cent of the response is for the area 'Automation and information technology', followed by 26 67 per cent for 'Administration and management', 11 67 per cent for 'Linguistics and literature', and 31 67 per cent of response for other areas

A large percentage of response devoted to studying the areas 'Automation and information technology' and 'Administration and management' confirms the earlier analysis made in course demands in LIS Both these areas were sought for further studies probably due to their application in LIS Even in chapter 4, the analysis of the areas of least competencies ranked the application of these two areas high, thus pointing to greater requirement for training in techniques and library application of automation and information technology, as well as administration and management

Considering sub-areas in the response to interest in other subjects the first two areas attracting maximum response are again 'Computer applications' and 'Management' followed by 'Communication' and 'Information technology'

Demand for Advanced Courses in LIS

In the questionnaire part - 3 the respondents were asked "Would you enroll in any advanced courses* in librarianship?" i e to improve their formal professional qualifications The response to the question has been analysed quantitatively Only 48 of the respondents (i e 42 11 per cent) expressed interest in advanced courses in LIS

The table 50 presents the data regarding interest expressed in advanced courses in LIS by job-level and position Within each job-level and position the distribution has been done in four broad age groups as follows

1	Age up to 30 years,	2	From 31 to 40 years,
3	From 41 to 50 years, and	4	Above 50 years

Out of the respondents interested in advanced training in LIS, 62 5 per cent are professional librarians in administrative positions, and 37 5 per cent in non-administrative positions Out of the total administrators in the study 42 25 per cent, and out of the total non-administrators in the study 41 86 per cent have expressed interest in undertaking advanced LIS course This shows that the proportion of administrators and non-administrators in the study interested in advanced courses in LIS is not very different

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* The term advanced courses in LIS has been used for formal professional courses beyond bachelor's degree in LIS i e master's M Phil and Ph D programmes in LIS

Out of the respondents interested in advanced LIS courses, 50.00 per cent are professional assistants, 35.42 per cent are assistant librarians, and 14.58 per cent are deputy librarians. Considering this interest in advanced LIS courses in terms of percentage of respondent population in the study by job-level, 40.00 per cent of professional assistants, 47.22 per cent of assistant librarians, and 38.89 per cent of deputy librarians are interested. This shows that a larger proportion of assistant   librarians are interested in advanced LIS training, followed by professional assistants, and deputy librarians.

TABLE 50
INTEREST EXPRESSED IN ADVANCED LIS COURSES
BY POSITION & JOB LEVEL

POSITIONS JOB-LEVEL/ AGE GROUP	ADMINISTRATORS NUMBER	NON-ADMINISTRATORS NUMBER	ALL POSITIONS NUMBER
PROF.ASSTT.			
<31	0	2	2
31-40	3	4	7
41-50	3	10	13
>50	0	2	2
SUB TOTAL	6 N = 18	18 N = 42	24 N = 60
ASSTT.LIBN.			
<31	1	0	1
31-40	8	0	8
41-50	6	0	6
>50	2	0	2
SUB-TOTAL	17 N = 35	0 N = 01	17 N = 36
DY.LIBN.			
<31	0	0	0
31-40	0	0	0
41-50	2	0	2
>50	5	0	5

SUB-TOTAL	7 N = 18	0 N = 00	7 N = 18
TOTAL	30 N = 71	18 N = 43	48 N = 114

ALL LEVELS

<31	1	2	3
31 - 40	11	4	15
41 - 50	11	10	21
>50	7	2	9

* 54 RESPONDENTS GAVE RESPONSE AS "NO"
  12 RESPONDENTS DID NOT RESPOND TO THE RELEVANT QUESTION

Out of the professional assistants showing interest in advanced LIS courses 25 00 per cent are in administrative positions Out of the assistant and deputy librarians who are interested in advanced LIS courses, all are in administrative positions As out of the total respondents in the study, 30 00 per cent of the professional assistants are in administrative positions, it is observed that a lesser percentage of these are interested in advanced LIS training when compared with non-administrators However, in the actual response, the proportion of non-administrative professional assistants is three times (i e 75 00 per cent) than administrative professional assistants (who constitute 25 00 per cent)

The expression of interest in advanced LIS courses has been analysed by variable age vis-a-vis job-levels and positions The table 51 presents the result of the analysis

Out of administrators the response by age groups is

1	Age up to 30 years	3 33 per cent,
2	From 31 to 40 years	36 67 per cent,
3	From 41 to 50 years	36 67 per cent, and
4	Above 50 years	23 33 per cent.

This consistitutes maximum administrators in the age groups 31 to 40 years and 41 to 50 years, each having 36 67 per cent response, followed by 23 33 per cent in the age group above 50 years, and the least 3 33 per cent in the

age group up to 30 years. Comparing it with the total administrative respondents in these age groups in the study, 3 persons in the age group 31 to 40 years, 16 persons in the age group 41 to 50 years, and 22 persons in the age group above 50 years, did not show interest in advanced LIS training. Thus 21.43 per cent, 59.26 per cent, and 75.86 per cent of the administrative respondents in these three age groups respectively, are not interested in advanced LIS training.

TABLE 51
INTEREST EXPRESSED IN ADVANCED LIS COURSES BY AGE BY JOB - LEVEL & POSITION

POSITION/ JOB-LEVEL		A G E <31	G R O U P S 31 - 40	41 - 50	> 50	TOTAL
ADMIN.	NO.	1	11	11	7	30
	%	3.33	36.67	. 36.67	23.33	100
NON-ADMIN	NO.	2	4	10	2	18
	%	11.11	22.22	55.56	11.11	100
PROF. ASSTT.	NO.	2	7	13	2	24
	%	8.33	29.17	54.17	8.33	100
ASSTT. LIBN.	NO.	1	8	6	2	17
	%	5.88	47.06	35.29	11.76	100
DY. LIBN.	NO.	0	0	2	5	7
	%	0.00	0.00	28.57	71.43	100
ALL	NO.	3	15	21	9	48
	%	6.25	31.25	43.75	18.75	100

Out of non-administrators the distribution of interest in advanced LIS courses by age groups is as follows :

1. Age up to 30 years   :   11.11 per cent,
2. From 31 to 40 years   :   22.22 per cent,
3. From 41 to 50 years   :   55.56 per cent, and
4. Above 50 years   :   11.11 per cent.

This constitutes maximum 55 56 per cent of non-administrators in the age group 41 to 50 years, followed by 22 22 per cent from the age group 31 to 40 years, and 11 11 per cent each from the two age groups up to 30 years and above 50 years Comparing it with the total non-administrative respondents in the study, 6 persons in the age group 31 to 40 years, 15 persons in the age group 41 to 50 years, and 4 persons in the age group above 50 years, have not shown interest in advanced LIS training Thus 60 00 per cent non-administrators each in the age groups 31 to 40 years and 41 to 50 years, and 66 67 per cent in age group above 50 years, have not shown interest in under going advanced LIS training Comparing it with the response from administrative librarians, no appreciable difference in interest is observed as 42 55 per cent of the administrators and 41 86 per cent of the non-administrators are interested in advanced LIS training

The expression of interest in advanced LIS training among respondents of various job-levels has been analysed vis-a-vis age of the respondents Out of the professional assistants the distribution of interest is as follows

1	Age up to 30 years	8 33 per cent,
2	From 31 to 40 years	29 17 per cent,
3	From 41 to 50 years	54 17 per cent, and
4	Above 50 years	8 33 per cent

The response constitutes maximum of professional assistants in the age group 41 to 50 years (i e 54 17 per cent), followed by 29 17 per cent in the age group 31 to 40 years, and 8 33 per cent each in the two age groups up to 30 years and above 50 years When compared with the total professional assistants in the study, 7 persons in the age group 31 to 40 years, 20 persons is the age group 41 to 50 years, and 9 persons in the age group above 50 years, did not show interest in advanced LIS courses Thus 50 per cent, 60 61 per cent, and 81 82 per cent out of the total professional assistants in the study in the above three age groups respectively, did not show interest in advanced LIS courses Again there is not much difference in interest among the groups administrators, non-administrators and professional assistants, as in all these the interested persons range between 40 00 per cent to 42 25 per cent of the group

In the job-level assistant librarians, the distribution of interest in advanced LIS courses by age is as follows

1	Age up to 30 years	5 88 per cent,
2	From 31 to 40 years	47 06 per cent,

3.   From 41 to 50 years   :   35.29 per cent, and
4.   Above 50 years   :   11.76 per cent.

The interest is maximum in the age group 31 to 40 years of assistant librarians (i.e. 47.06 per cent), followed by 35.29 per cent in the age group 41 to 50 years, 11.76 per cent in the age group above 50 years, and 5.88 per cent in the age group up to 30 years. Comparing it with total number of respondents in the study, one assistant librarian in the age group 31 to 40 years, 9 each in the age groups 41 to 50 years and above 50 years, have not expressed interest in advanced LIS courses. Thus 11.11 per cent, 60.00 per cent, and 81.82 per cent of assistant librarians respectively in the above three age groups, have not shown interest in advanced LIS training. Making a comparison with the interested administrators, non-administrators and professional assistants, it is observed that a larger percentage (i.e. 47.22 per cent) of total assistant librarians are interested in advanced LIS courses, whereas in the other groups percentage in any did not exceed 42.25 per cent.

Among the deputy librarians, the distribution of interest in advanced LIS courses by age is as follows :

1.   Age up to 30 years   :   Not applicable,
2.   From 31 to 40 years   :   0.00 per cent,
3.   From 41 to 50 years   :   28.57 per cent, and
4.   Above 50 years   :   71.43 per cent.

This constitutes maximum of deputy librarians in the age group above 50 years (i.e. 71.43 per cent), followed by 28.57 per cent in the age group 41 to 50 years, and none in the age group 31 to 40 years. Comparing it with the total number of deputy librarians in the study in these age groups, one person in the age group 31 to 40 years, 2 persons in the age group 41 to 50 years, and 8 persons in the age group above 50 years, have not shown interest in advanced LIS courses. Thus 100.00 per cent, 50.00 per cent, and 61.54 per cent of the deputy librarians in the above three age groups respectively, have not shown interest in advanced LIS courses. Comparing it with the other groups i.e. administrators, non-administrators, professional assistants, and assistant librarians, it is observed that least percentage (i.e.38.89 per cent) of deputy librarians are interested in advanced LIS courses, as the percentage in the rest of the groups varies from 40.00 per cent to 47.22 per cent.

So taking into consideration the response to undergo advanced LIS training, it has been observed that all respondents in the age group up to 30

years are interested to undertake advanced LIS courses The response in various job-levels and positions is as follows ·

Age	Maximum Interest	Minimum Interest
Upto 30 years	All equal	All equal
From 31 to 40 years	Assistant Librarians	Deputy Librarians
From 41 to 50 years	Deputy Librarians	Professional Assistants
Above 50 years	Deputy Librarians	Professional Assistants, and Assistant Librarians

As evident from table 51, maximum respondents interested in advanced LIS courses are in the age group 41 to 50 years, who constitute 43 75 per cent of the response This is followed by age group 31 to 40 years (31 25 per cent of response), above 50 years (18 75 per cent of response), and the least in the age group up to 30 years (6 25 per cent of the response)

Lack of Training in Scientific, Technical and Professional Courses

The respondents were asked · Are there any formal scientific, technical or professional courses you lack which would have been specially helpful in your position ? If the response was 'yes', they were asked to specify courses or course areas The response has been analysed below

The table 52 presents the response and provides number and percentage of 'yes' response by position and job-level With in each job-level sub-groups of administrators and non -administrators have been made Percentages denote 'yes' response within each sub-group as a function of total respondents with in each subgroup

In all 42 of the 114 respondents expressed that they lack training in scientific, technical and professional courses, amounting to 36 84 per cent of the total respondents The maximum of these are in the group administrators, as these constitute 43 66 per cent of the administrators Out of three job-levels maximum are administrative assistant librarians

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TABLE 52
LACK OF TRAINING IN SC., TECH.,
& PROFESSIONAL COURSES

POSITIONS	ADMINISTRATORS		NON-ADMIN.		ALL POSITIONS	
JOB-LEVELS	NUMBER	%	NUMBER	%	NUMBER	%
PROF.ASST.	N = 18		N = 42		N = 60	
N = 60	5	27.78	11	26.19	16	26.67
ASSTT.LIBN.	N = 35		N = 1		N = 36	
N = 36	19	54.29	0	0.00	19	52.78
DY. LIBN.	N = 18		N = 0		N = 18	
N = 18	7	38.89	0	0.00	7	38.89
	N = 71		N = 43		N = 114	
TOTAL	31	43.66	11	25.58	42	36.84

* PERCENTAGES ARE WITHIN EACH SUBGROUP.

TABLE 53
LACK OF TRAINING IN SC., TECH.,
& PROFESSIONAL COURSES

JOB-LEVELS	PROF.ASSTT.		ASSTT.LIBN.		DEPUTY LIBN.		ALL LEVELS	
POSITION	(NO)	%	(NO)	%	(NO)	%	(NO)	%
ADMIN.	(5)	7.04	(19)	26.76	(7)	9.86	(31)	43.66
NON ADMIN.	(11)	25.58	(0)	0.00	(0)	0.00	(11)	25.58
ALL POS.	(16)	14.04	(19)	16.67	(7)	6.14	(42)	36.84

* PERCENTAGES ARE WITH IN EACH JOB-POSITION.

These constitute 54 29 per cent of the administrative assistant librarians, followed by 38 89 per cent of the administrative deputy librarians (however, there is no non-administrative deputy librarian in the study), and the least 27 78 per cent of the administrative professional assistants As observed in table 53 out of administrators 7 04 per cent professional assistants, 26 76 per cent assistant librarians, and 9 86 per cent deputy librarians expressed lack of training in scientific, technical and professional courses

Among the non-administrators only 25 58 per cent of respondents expressed lack of such training, having only non-administrative professional assistants These constitute 26 19 per cent of the total non-administrative professional assistants

Observing the response by job-levels, maximum again are 52 78 per cent of the assistant librarians, followed by 38 89 per cent of the deputy librarians, and the least 26 67 per cent of the professional assistants As observed from table 54 , out of the total professional assistants in the study 18 33 per cent are non-administrative, and 8 33 per cent are administrative professional assistants

Among the total assistant librarians in the study 52 78 per cent expressed lack of training (All these are administrative assistant librarians) Out of the deputy librarians (who are all administrators), 38 89 per cent expressed lack of scientific, technical and professional training

So it can be inferred that a larger percentage of administrators (43 66 per cent), and assistant librarians (52 78 per cent) feel that they lack training in formal scientific, technical and professional courses, which would have been specially helpful in their job

The respondents were asked to specify course areas of scientific, technical and professional courses, which they lack and which would have been specially helpful in their position The response has been analysed after grouping the data, the result of which is given below

Automation and Information Technology : In all 25 (59.52 per cent of response)

Automation (Application)	18
Computer Operations	1
Database Management Systems	1
Information Technology Management	4
Information Technology	1

TABLE 54
LACK OF TRAINING IN SC., TECH., & PROFESSIONAL COURSES

POSITIONS	ADMINISTRATORS		NON ADMINISTRATORS		ALL POSITIONS	
JOB-LEVELS	NUMBER	%	NUMBER	%	NUMBER	%
PROF. ASSTT. N = 60	5	8.33	11	18.33	16	26.67
ASSTT. LIBN. N = 36	19	52.78	0	0.00	19	52.78
DY. LIBN. N = 18	7	38.89	0	0.00	7	38.89
TOTAL N = 114	31	27.19	11	9.65	42	36.84

Administration and Management : In all 17 (40.48 per cent of response).

Management	:	5
Communication Techniques	:	4
Operations Research	:	2
Personnel Management	:	2
Budgeting	:	1
Information Management	:	1
Marketing Services	:	1
Public Relations	:	1

The grouping of response on the areas of interest revealed that 59.52 per cent of the response is for the area 'Automation and information technology', followed by 40.48 per cent of response for 'Administration and management'.

Once again the response distribution confirms the earlier observations made in the quantitative analysis of job-activities, course demands in LIS, as well as in the analysis of the areas of least competencies. During analysis in all these, the two areas 'Automation and information technology', and `Library administration and management' received overwhelming response and these

were rated high

Job-Activities for which Training has not Prepared

The respondents were asked "In relation to your present position, are there any activities for which your training has not prepared you?" and if 'yes' to "specify these activities" The question was specially asked to ascertain the relevance of LIS school training to the requirements of the library job and to ascertain the areas of weakness, if any

The response to the above question has been analysed below The table 55 presents the data by job-positions Out of the administrators 38 03 per cent felt that the LIS school training has not equipped them for some job-activities in the library, whereas 46 48 per cent of administrators do not think so Out of the administrators 15 49 per cent have not responded to this question

TABLE 55
RESPONDENTS EXPRESSING "TRAINING HAS NOT PREPARED"

RES-PONSE	ADMINISTRATORS		NON ADMINISTRATORS		ALL POSITIONS	
	NO (N=71)	%	NO (N=43)	%	NO (N=114)	%
YES	27	38 03	9	20 93	36	31.58
NO	33	46 48	23	53 49	56	49 12
NO RESPONSE	11	15 49	11	25 58	22	19 30

*PERCENTAGES ARE WITH IN A JOB-POSITION

Among the non-administrators 20 93 per cent stated that LIS school training has not equipped them to do some of the job activities in the library, and 53 49 per cent do not think so whereas 25 58 per cent have not responded to this question

Considering all positions together 31 58 per cent of the respondents are of the opinion that for some job-activities, the LIS school training has not equipped them and 49 12 per cent do not think so In all 19 30 per cent

respondents have not responded to this question. As obvious, 31.58 per cent is a large number, who do not feel satisfied with the training from LIS schools, and 19.30 per cent are indecisive, a part of this may also be dissatisfied. Thus, a large number of librarians think that LIS school training has not fully equipped them.

The table 56 presents this data by job-level.

TABLE 56
RESPONDENTS EXPRESSING "TRAINING HAS NOT PREPARED"

RES-PONSE	PROF. ASSTT. (NO)	%	ASSTT. LIBN. (NO)	%	DEPUTY LIBN. (NO)	%	ALL LEVELS (NO)	%
YES	(11)	18.33	(14)	38.89	(11)	61.11	(36)	31.58
Admin.	(2)	3.33	(14)	38.89	(11)	61.11	(27)	23.68
Non-Admin.	(9)	15.00	-	-	-	-	(9)	7.89
NO	(34)	56.67	(16)	44.44	(6)	33.33	(56)	49.12
Admin.	(11)	18.33	(16)	44.44	(6)	33.33	(33)	28.95
Non-Admin.	(23)	38.33	-	-	-	-	(23)	20.18
NO RES.	(15)	25.00	(6)	16.67	(1)	5.56	(22)	19.30
Admin.	(5)	8.33	(5)	13.89	(1)	5.56	(11)	\9.65
Non-Admin	(10)	16.67	(1)	2.78	-	-	(11)	9.65
TOTAL	(60)	100.00	(36)	100.00	(18)	100.00	(114)	100.00

*PERCENTAGES ARE WITHIN A JOB-LEVEL.

Out of the professional assistants 18.33 per cent feel that the training from LIS school has not equipped them for some job-activities, and 56.67 per cent of the professional assistants do not think so. (The remaining 25.00 per cent have not responded to this question). Out of the assistant librarians, 38.89

per cent feel that LIS school training has not equipped them for some of the job-activities and 44 44 per cent do not think so (The remaining 16 67 per cent of the assistant librarians have not responded to this questions) Out of the deputy librarians 61 11 per cent feel that LIS school training has not equipped them for some of the job-activities in the library, and 33 33 per cent do not think so (The remaining 5 56 per cent of the deputy librarians have not responded to this question)

The response when compared by job-levels, shows that the percentage of professional librarians who feel that the LIS school training has not equipped them, increases with increase in the job-level The reasons for this may be the time elapsed since they left the LIS school

The table 57 presents this data The percentages have been worked out giving distribution within a position

TABLE 57 :
RESPONDENTS EXPRESSING "TRAINING HAS NOT PREPARED"

JOB LEVEL/ JOB - POSITION	PROF ASSTT N=60		ASSTT LIBN N=36		DY LIBN N=18		ALL LEVELS N = 114	
	(No)	%	(No)	%	(NO)	%	(NO)	%
Admin	(2)	2 82	(14)	19 72	(11)	15 49	(27)	38.03
Non-Admin.	(9)	20 93	(0)	0 00	(0)	0 00	(9)	20 93
All Posi	(11)	9 65	(14)	12 28	(11)	9 65	(36)	31 58

* PERCENTAGES ARE WITH IN A JOB - POSITION

Out of the administrators 38 03 per cent have stated that LIS school training has not equipped them for some of the job-activities, which constitute of maximum 19 72 per cent assistant librarians, followed by 15 49 per cent deputy librarians and the least 2 82 per cent professional assistants Among non-administrators all are professional assistants (i e 20 93 per cent), who think that LIS school training has not fully equipped them Among all respondents who felt that LIS school training has not equipped them (i e 31 58 per cent), there are maximum assistant librarians (12 28 per cent), followed by 9 65 per cent each from the groups professional assistants and deputy librarians So in terms of

total number of respondents, expressing that LIS school training has not equipped them for some job-activities, maximum are the assistant librarians, and an equal number of the professional assistants and the deputy librarians.

The 18.33 per cent of the professional assistants who think that the LIS school training has not equipped them, constitute of 3.33 per cent administrators and 15.00 per cent non-administrators, whereas all the assistant (38.89 per cent) and deputy librarians (61.11 per cent) saying 'yes' are administrators. (There were only 2.78 per cent non-administrative assistant librarians and 0.00 per cent non-administrative deputy librarians in the sample).

The respondents who think that the LIS school training has not equipped them for some of the job-activities they perform in the library, were asked to specify the job-activity(ies) or the area(s) for which they have not been equipped. The response has been grouped and analysed. The result of the grouped response is as follows :

Library Administration and Management : In all 15 (28.85 per cent of response).

Management	:	7
Public Relations	:	4
Communication	:	1
Periodicals Management	:	1
Personnel Management	:	1
Standardisation	:	1

Library Automation and Information Technology : In all 14 (26.92 per cent of response).

Indexing and Abstracting: In all 11 (21.15 per cent of response).

Library Routines : In all 8 (15.38 per cent of response).

Arrangement and Filing	:	2
Acquisition	:	1
Binding	:	1
Cataloguing of Non-book Materials	:	1
Circulation of Reading Materials	:	1
Music Libraries	:	1
Stock Verification	:	1

Other Areas : In all 4 (7.69 per cent of response).

Editing	1
Library Aesthetics	1
Reader's Psychology	1
Translation work	1

In all there are 52 job-activities/areas pointed out by the 36 respondents. Out of 52 responses 'Library administration and management' gets 28 85 per cent of response, followed by 'Library automation and information technology' (26 92 per cent of response), 'Indexing and abstracting' (21 15 per cent of response), 'Library routines' (15 38 per cent of response), and the other areas getting the remaining 7 69 per cent of response

The first two positions for 'Library administration and management' and 'Library automation and information technology' again confirms the observations made in the quantitative analysis of job-activities, course demands in LIS, analysis of areas of least competencies, course demands in other subject areas, and the observations made during analysis of scientific, technical and professional courses which the respondents lack

Expectations from Library Schools

The respondents were asked "In what other ways, in addition to workshops, seminars and courses, do you feel that the LIS schools could help you in your professional development?" The response to the question was from 54 39 per cent (62 persons out of 114) Of the total respondents 45 61 per cent did not respond to the question

The table 58 presents the response, and provides number and percentage of response by position and job-level Within each job-level sub groups of administrators and non-administrators have been made, along with response for all positions in each job-level and all job-levels in each job-positions Percentage are of the respondents with in each sub-group giving specific response suggestions/comments

Out of those responding to this question there is not much difference among the administrators and non-administrators, as the response is from 54 93 per cent and 53 49 per cent of administrators and non-administrators respectively Among the administrators, maximum response is from the assistant librarians (65 71 per cent) followed by 50 00 per cent of the deputy librarians, and the lest 38 89 per cent of the professional assistants Among the profess-

TABLE 58
EXPECTATIONS FROM LIBRARY SCHOOLS

POSITION	ADMINISTRATORS		NON-ADMINISTRATORS		ALL POSITIONS	
JOB-LEVEL	NO.	%	NO.	%	NO.	%
PROF.ASSTT. N = 60	7	38.89	23	54.76	30	50.00
ASSTT.LIBN. N = 36	23	65.71	0	0.00	23	63.89
DY.LIBN. N = 18	9	50.00	0	0.00	9	50.00
ALL LEVELS	39	54.93	23	53.49	62	54.39

* PERCENTAGES DENOTE RESPONSE WITH IN EACH SUB-GROUP.

ional assistants a larger percentage (54.76 per cent) of non-administrators responded to this question. Considering all the positions together, maximum response is from 63.89 per cent of the assistant librarians, followed by 50.00 per cent each of the professional assistants and the deputy librarians.

The suggestions/comments in the responses have been grouped and presented below. In all 85 suggestions/comments were available (the number is higher than respondents as some of the respondents offered more than one suggestion/comment).

Library schools should act as clearing house of information : In all 22 (25.88 per cent of response).

The suggestions expect the library schools to provide updated information/latest information in LIS, offer SDI services; organise lectures on current topics, recent trends in LIS; should provide professional librarians with bibliographies, etc. in specific areas; and should offer some means of regular exchange of information with the past graduates of the LIS schools, like newsletter, etc.

Library schools should be a place for organising discussions, meetings, study circle, etc. : In all 15 (17.65 per cent of response).

The suggestions expect the library school to be a place for holding discussions, professional meetings etc Library schools should organise alumni associations, and professional study circles Thus LIS schools are expected to be a place for discussions for professional librarians and past graduates

Library schools should offer guidance and counseling to professional librarians : In all 10 (11.76 per cent of response).

Some of the respondents expect library schools to offer guidance and counseling to professional librarians, in professional development and placement.

Other suggestions/comments : In all 3 (3.53 per cent of response).

These were

- Library schools should develop code of professional ethics for librarians, and
- Library schools should make efforts to improve image of the profession

Suggestions/comments about courses etc. : In all 35 (41.18 per cent of response).

A large number of respondents have given suggestions/comments, though not asked, regarding courses and curricula etc These are

- The instructions should be practice oriented
- Courses should include visits to libraries
- Live situation should be created in teaching
- Should organise refresher courses, short term specialised courses, continuing education programmes, etc
- Part-time research programmes for professional librarians should be initiated.
- Should offer programme in modern information technology, library automation, audio-visual techniques, etc

In addition, four respondents commented that LIS schools 'can not help' in professional development of professional librarians

In general the response revealed that professional librarians are not satisfied with the role of LIS schools They expect change in the nature of courses, method of instruction etc A variety of roles in addition to simply

imparting instructions have been suggested, like acting as clearing house of information, as a place for discussions, as a counselor, etc. The role of LIS school in continuing education for professional librarians has been specially emphasised by the respondents.

LIS Courses Attended During Service

In part three of the questionnaire, the respondents were asked: "During your library service did you attend any course(s)...", and if "yes", to specify the course(s). The response to this question has been analysed below.

The table 59 presents the data by job-levels, and within each job-level sub-groups have been made for administrators, non- administrators, and taking all positions together. The percentages refer to the percentage of "yes" response within each sub-group for attending LIS courses.

TABLE 59
LIS COURSES ATTENDED DURING SERVICE

POSITIONS	ADMINISTRATORS		NON ADMINISTRATORS		ALL POSITIONS	
	N=71		N=43		N=114	
JOB-LEVEL	NUMBER	%	NUMBER	%	NUMBER	%
PROF.ASSTT.	N=18		N=42		N=60	
N=60	14	77.78	23	54.76	37	61.67
ASSTT.LIBN.	N=35		N=1		N=36	
N=36	27	77.14	0	0.00	27	75.00
DY.LIBN.	N=18		N=0		N=18	
N=18	12	66.67	0	0.00	12	66.67
TOTAL	53	74.65	23	53.49	76	66.67

*PERCENTAGES ARE WITHIN EACH SUBGROUP.

In all 76 (out of 114) respondents (i.e. 66.67 per cent) attended LIS courses during library service. Considering the percentage of professional librarians, who have attended courses, as a function of the total strength within each sub-

group, a larger percentage is observed among the administrators (i e 74 65 per cent of administrators) In comparison only 53 49 per cent of non-administrators attended courses Out of various job-levels the maximum percentage is observed in the sub-group administrative professional assistants (i e 77 78 per cent of them), followed by 77 14 per cent of the administrative assistant librarians, 66 67 per cent of the administrative deputy librarians, 54 76 per cent of the non-administrative professional assistants, and the least 0 00 per cent of non-administrative assistant librarians (There is only one person in non-administrative assistant librarian group in the study, and none as non-administrative deputy librarian) The percentage within each sub-group increases with the decrease in the job-level among administrators But, when all positions are taken together, the maximum percentage is of assistant librarians (75 00 per cent), followed by deputy librarians (66 67 per cent), and minimum percentage is of professional assistants (61 67 per cent), who have attended LIS courses during library service

The table 60 presents the data by job-position Among the 74 65 per cent of administrators who attended courses during library service, the maximum are 38 03 per cent assistant librarians, followed by professional assistants 19 72 per cent, and the least 16 90 per cent deputy librarians

TABLE 60
LIS COURSES ATTENDED DURING SERVICE

POSITION JOB-LEVEL	ADMINISTRATORS N=71		NON-ADMIN N=43		ALL POSITIONS N=114	
	NO	%	NO	%	NO	%
PROF ASSTT	14	19 72	23	53 49	37	32 46
ASSTT LIBN	27	38 03	0	0 00	27	23 68
DY LIBN	12	16 90	0	0 00	12	10 53
ALL LEVELS	53	74 65	23	53 49	76	66 67

* PERCENTAGES ARE WITHIN EACH JOB-POSITION

The 53 49 per cent of non-administrators, who have attended LIS courses during library service, constitute of only professional assistants The only one non-administrative assistant librarian in the study has not attended any course

during service, and there was no non-administrative deputy librarian. Considering all the positions together, 66.67 per cent of respondents, who have attended LIS courses during library service, constitute of maximum 32.46 per cent professional assistants, followed by 23.68 per cent assistant librarians, and the least 10.53 per cent deputy librarians.

The table 61 presents the data by job-level. The percentages worked out are percentage with in a job-level.

TABLE 61
LIS COURSES ATTENDED DURING SERVICE

POSITION JOB-LEVEL	ADMINISTRATORS		NON-ADMIN.		ALL POSITIONS	
	NO.	%	NO.	%	NO.	%
PROF.ASSTT. N=60	14	23.33	23	38.33	37	61.67
ASSTT.LIBN. N=36	27	75.00	0	0.00	27	75.00
DY.LIBN. N=18	12	66.67	0	0.00	12	66.67
ALL LEVELS N=114	53	46.49	23	20.18	76	66.67

* PERCENTAGES ARE WITH IN EACH JOB - LEVEL.

Among the 61.67 per cent of professional assistants, who have attended LIS courses during library service, 38.33 per cent are non-administrators and 23.33 per cent are administrators.

Among 75.00 per cent of assistant librarians, and 66.67 per cent of deputy librarians who have attended LIS courses during library service, none is non-administrator. Considering all levels together, 66.67 per cent of respondents, who have attended LIS courses during library service, constitute of 46.49 per cent administrators and 20.18 per cent non-administrators.

The respondents who have attended courses during library service have been asked to specify courses. The response has been analysed after grouping, which is given below. The response below also includes courses

attended in other subject areas. A number of respondents have simply stated that they attended courses in LIS, who number 30 out of 76 total respondents. So, the response below presumes that they have attended short term training programmes. Only 46 respondents gave specific course/course area. As a number of them gave more than one course/course areas, the total number of courses specified are 79. Their distribution is as follows:

Regular LIS Courses, including Ph.D. : In all 36 (45.57 per cent of response).

Ph.D	4
M.L I Sc	21
Others	11

Short-term Courses in LIS and Related Areas : In all 23 (29.11 per cent of response).

Computer Application in Libraries Including CDS/ISIS, MINISIS, etc	20
Library Management	2
Indexing	1

Courses in Other Subject Areas : In all 14 (17.72 per cent of response)

Ph D	1
M A	9
Others	4

Refresher Courses in LIS : In all 6 (7.59 per cent of response).

Again it is observed that out of the courses specified more than 25 per cent of the response is for computer applications alone. This confirms the earlier observations during analysis in chapter 4 and in this chapter Library management did not score much though it was among the first two areas during analysis, earlier in this chapter. The reason for this may be that short term courses in this area are not easily available. Taking into consideration the unspecified areas in LIS by 30 respondents, it can be observed that a larger group has attended short term courses.

Thus, it may be concluded that a larger percentage of administrators have attended courses during library service. Out of three job-levels, a larger percentage of assistant librarians have attended courses during library service. Among the administrators also, the largest constituent attending courses during

library service is of assistant librarians. It is only by virtue of larger number of professional assistants in the study that they constitute the largest group who have attended courses during library service. This again needs to be qualified, as most of them have pursued regular LIS courses during library service. A large percentage of professional librarians have attended short term courses in LIS (i.e. 30 persons who have not specified course areas, in addition to 29 responses out of 79 responses). This is in conformity with the interest expressed during the survey and observed during analysis of course demands in LIS.

Suggestions from Respondents for Courses and Curricula

The part four of the questionnaire included three open questions, seeking comments on the job-activities, suggestions for courses and curricula, and their suggestions about this study. There were but only a few responses to the question one and three. Even these few comments were limited to comments like 'satisfactory', 'good', etc. and warrant no analysis.

There are large number of responses to second question i.e. 'Your suggestions for courses and curricula'. Out of 114 there are 61 respondents (53.51 per cent) who have responded. In all there are 99 comments/suggestions. The response has been analysed after grouping below.

Emphasis should be laid on practical aspects in training : In all 29 (29.29 per cent of response).

27.27 per cent of response wants LIS training courses to be practice oriented, and expects that theoretical aspects in the curricula be reduced.

Need based (Job-oriented) training : In all 9 (9.09 per cent of response).

The respondents have expressed that the LIS training should take into consideration the actual job-requirements in the library to update curricula in library schools. Again there is an expression for more of practice oriented courses.

Library Automation and Information Technology, etc. : In all 23 (23.23 per cent of response).

The responses include a number of areas grouped under this head. These are :

Computer application in libraries   :   12 responses,

Latest techniques in libraries   8 responses, and
Information technology   3 responses

The respondents have sought the inclusion of these areas in curricula in library schools

Library Administration and Management etc. : In all 14 (14.14 per cent of responses).

The respondents want greater emphasis on this area which includes

Management of libraries   11 responses,
Communication skills   2 responses, and
Systems analysis   1 response

Others : In all 24 (24.24 per cent of response).

The responses include a number of areas, e g

Subject specialisation in LIS   5 responses, and
Refresher courses for librarians   4 responses

A number of other responses want short term courses on role of librarians as information scientist, library routines, indexing and abstracting, professional ethics, etc A few of the respondents expect LIS teachers to be more knowledgeable, LIS schools to use the experience of working librarians in curriculum design and instruction, and greater coordination between LIS schools and working librarians, etc

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6

Results and Recommendations

The LIS educational facilities have been briefly surveyed in chapter one "The infrastructure for library education available in India is mainly concentrated on pre-service training of librarians, grossly neglecting the continuing education aspect of the working librarians [W]ithout some provision of continuing education in accordance with the current developments, one can not be expected to work satisfactorily as an efficient librarian for long The need for revising the curricula of library education, and more important, the need for providing continuing education for working librarians arise in this context."[1]

Infact regular courses offered by LIS schools "provide excellent acquaintance with fundamentals These degrees, at present, are a mere initiation into a lifelong process of learning"[2] Not only the regular LIS courses are insufficient to provide knowledge, skills and atitude for efficient working in libraries in various positions, there are other factors which create demand for continuing education among the professional librarians Factors like obsolescence in LIS information, the generation of information on new concepts, techniques and tools in LIS work for effective and efficient handling of information, require that professional librarians should frequently update their knowledge, specially in the areas of their work in the library

The present study concentrates on the educational needs of professional librarians working in the universities

The study has broadly aimed to investigate the following

1   To study the background characteristics of the professional librarians

in the university libraries;

2. To find out the educational needs of the professional librarians in the university libraries, to be revealed by the study of their job-dimensions; and

3. To find out the educational needs of the professional librarians by finding out their interest in undertaking courses in LIS and other subject areas, and by their views on available LIS training programmes in the library schools.

Professional Librarians in University Libraries : Background Characteristics

The Chapter three has been devoted to the study of background characteristics of the professional librarians working in the five university libraries in the sample. The analysis of the background characteristics is extremely helpful to understand the professional librarians. The analysis is not only helpful for the present study, but also provides essential information useful to the LIS education planners. The information about the respondents can help planners to know about the target population for the continuing education programmes in LIS, and can be profitably used during design of continuing education programmes. An overview of the trends observed in the analysis of background characteristics is as follow :

1. The ratio among various job-levels, i.e. deputy librarians, assistant librarians, and professional assistants in the study is 3 : 6 : 10. In effect one deputy librarian supervises two assistant librarians and 3.33 professional assistants.

2. The administrative and non-administrative librarians constituted 62.38 per cent and 37.72 per cent of the respondents respectively. Out of the 36 assistant librarians, one is non-administrator, and out of 60 professional assistants, 18 are working in administrative positions being in charge of units in which they work.

3. The men and women constituted 64.91 per cent and 35.09 per cent respectively. The ratio of men and women in various job-levels is:- 5:1 among deputy librarians, 2:1 among assistant librarians, and 7:5 among professional assistants. Thus as we go higher in the job-level the ratio of women librarians decreases.

4   Among the administrators, the men and women constitute 69 01 per cent and 30 99 per cent respectively, i e in the ratio of 4 45 2 Among the non-administrators, the percentage of women is comparatively higher They constitute 41 86 per cent, i e men and women are in the ratio of 4 17.3

5   The mean age of the professional librarians is 46 25 years The mean age of women is 44 years, which is 3 47 years less than men The mean age of administrators is 47 63 years, which is 3 65 years more than non-administrators

6   There is a span of about 9 years in the mean age range of various job-levels For deputy librarians the mean age is 53 61 years, for assistant librarians 45 67 years, and for professional assistants 44 38 years The difference is greater between assistant and deputy librarians

7   The mean professional experience of all respondents is 20 years For women it is 19 23 years and for men 20 42 years For the administrators, the mean professional experience is 22 14 years, which is 5 67 years more than the non-administrators

8   There is a span of 11 23 years in the mean professional experience of various job-levels, which is 28 50 years for deputy librarians, 20 31 years for assistant librarians, and 17 27 years for professional assistants The difference is greater between deputy and assistant librarians

9   For all job-levels taken together, the difference in professional experience in men, women or both taken together among administrative, non-administrative, or all positions taken together, is very small i e 0 35 year to 1 19 years only This indicates stagnation at lower job-levels

10 The mean professional experience after last professional degree is 18 32 years This is in general less than the total professional experience as expected This points out that professional librarians continue professional education during service Only in the case of job-level deputy librarians experience, before or after last professional degree, is same

11 The experience after last professional degree is about two years less than the total professional experience The mean for all respondents is 1 68 years less, for professional assistants it is 2 37 years less and for

assistant librarians it is 1.37 years less. However, there is no difference in experience in the case of deputy librarians. Thus, the difference decreases as we go to higher job-levels. This shows that there is a greater tendency to attend regular courses in LIS at the level of professional assistants. This tendency reduces as we go to higher job-level assistant librarian, whereas this tendency no more exists at the job-level deputy librarian.

12. One of the major activity of the professional librarians is to manage a 'department/division' of the library. 'Cataloguing and classification', 'selection and acquisition', 'reference', 'periodicals', and 'circulation and lending' are other major activities of the respondents. 'Systems analysis', 'non-print material', etc. do not constitute to be the primary activity of more than one respondent. Only one respondent is primarily engaged in 'library automation'.

13. The deputy-librarians are primarily engaged as 'head of a department/division', or involved in job-activities as 'personnel management', 'reference', 'cataloguing and classification', and 'public relations', each drawing more than 20 per cent of this job-level.

14. The assistant librarians are chiefly involved as 'head of a department/division', or in 'reference', 'selection and acquisition', and working as 'associate head' in the library. 'Personnel management' and 'public relations' do not constitute to be the primary activities of assistant librarians.

15. The chief activity of the professional assistants are 'cataloguing and classification', 'selection and acquisition', 'periodicals', 'circulation and lending', and 'reference'. The managerial and supervisory activities are lesser here, as compared to deputy and assistant librarians.

16. In general respondents expressed that their talents are not being fully utilised, as only 23.68 per cent of them checked utilisation of talents to 'full capacity'. Talents utilisation was marked 'very well' by 24.56 per cent of the respondents. Thus 48.24 per cent of the respondents feel that their talents are being utilised 'very well' or better than this.

17. Talents utilisation in the library was reported 'Very little' by 7.90 per cent and 'not at all' by 2.63 per cent of the respondents. The respondents in the former group are mainly assistant librarians, and in the later group all

are professional assistants The analysis of talents utilisation indicates that efforts should be made in the library to make effective use of talents of professional librarians, specially at the job-level professional assistants This is so because the respondents have expressed better utilisation of talents, as we go to higher job-levels

18.   Out of all the respondents, 43 86 per cent possess the highest professional degree as bachelor's in LIS The remaining 56 14 per cent have passed master's degree in LIS or higher degrees Only 5 26 per cent of the respondents possess M Phil or Ph D degree in LIS The respondents with only bachelor's in LIS constitute of professional assistants, 32 46 per cent, assistant librarians, 7 89 per cent, and deputy librarians, 3 51 per cent of respondents This indicates that nearly 40 per cent , of the professional librarians are likely to go for master s degree in LIS in near future (taking into consideration the present qualifications for the post of deputy and assistant librarians), and because the professional qualifications are higher as we go to higher job-levels even among the respondents

19   As we go to higher job-levels, the percentage of professional librarians, who passed out their last professional degree before 1970, increases, as 8 33 per cent of professional assistants, 19 44 per cent of assistant librarians, and 50 00 per cent of deputy librarians obtained their last professional degree before 1970

20   The trend reverses if the professional librarians who passed out their last professional degree during the years 1970 to 1984 are taken together The percentage of each job-level for this period are 71 67 per cent of professional assistants, 61 11 per cent of assistant librarians, and 27 78 per cent of deputy librarians

21   Out of all respondents, 57 02 per cent obtained their last professional degree before 1980 Another 22 81 per cent passed out last professional degree during the years 1980 to 1984 Only 20 18 per cent of the respondents obtained their last professional degree after 1984 This trend holds good for various job-levels also This indicates that continuing education programmes in LIS are desirable for professional librarians to keep them upto date with the developments in LIS and allied disciplines

22.   Out of all respondents 91.23 per cent possess master's degree in a
      discipline other than LIS. These include 8.77 per cent, who have obtained
      M.Phil. or Ph.D. degree in an other subject. Only 8.77 per cent of the
      respondents have passed only bachelor degree in an other subject.
      Comparing with qualification possessed in LIS, the respondents are
      more qualified in subjects other than LIS. It indicates that a number of
      professional librarians have opted for library profession as their second
      choice.

23.   A majority of the respondents have bachelor's/master's degree in arts
      (including social sciences), (about 79 per cent), followed by sciences
      (about 11 per cent), and commerce (about two per cent). (The percentage
      does not include 8.77 per cent of the respondents who have M.Phil./
      Ph.D. degree). It indicates a need for considering subject background of
      persons entering the profession, in order to have adequate number of
      professional librarians with science and commerce background.

Job-dimensions of the University Librarians

      Job-activities performed by the professional librarians in the university
have been the subject of study in chapter four. The job-activities have been
broadly grouped into specialised library activities, and general management
and administrative activities. The response, in the form of the time consumed
and the importance of each job-activity in the job of each respondent, has been
analysed in both time, and importance dimension. The response has been sought
in a format having three levels of choice in each dimension. The response in
two dimensions has been merged to construct joint time-importance dimension,
the third dimension. Weights have been used to merge three levels into one.
This score has been used to obtain ranked lists of job-activities for each
dimension in respect of each of the groups: administrators, non-administrators,
professional assistants, assistant librarians, deputy librarians, and all
respondents taken together.

      Chiefly the response in relation to job-activities has been analysed
quantitatively. Qualitative analysis has been used only to some extent. An
overview of trends observed is given below :

1.   The respondents' score of applicability of job-activity items listed in the
      questionnaire, varies a lot. The mean number of job-activities checked
      by all respondents taken together is 9.149 for all job-activities, 5.657 for
      specialised library activities, and 3.491 for administrative activities. The

range for all job-activities checked taken together is 1 to 20, for specialised library activities 0 to 16, and for administrative activities it is 0 to 8, for all respondents The standard deviation for all activities is 4 698, for specialised library activities it is 3 386, and for administrative activities it is 3 174

2.1 The mean number of specialised library activities checked by administrators is 5 943, which is higher than 5 186 for non-administrators The standard deviation for the specialised library activities for administrators is 3 352, which is slightly lower than 3 391 for non-administrators And, the range of specialised library activities checked by administrators is smaller i e 0 to 12, which is 1 to 16 for non-administrators

2.2 The mean for administrative activities checked by administrators is 5 408, which is much higher (nearly 17 times more) than that of non-administrators, who checked a mean of 0 325 administrative activities Likewise standard deviation for administrators is 2 469, which is higher than 0 738 for non-administrators The range too is higher for administrators which is 1 to 8, as compared with 0 to 4 for non-administrators

2.3 Thus librarians in administrative position checked more job-activities Except for specialised library activities, even the range and standard deviation of job-activities checked by administrators is higher This indicates a greater variation in the job-description of administrative librarians

2.4 The range and standard deviation of specialised library activities checked by administrators is slightly lower and the mean is slightly higher This indicates that the job of administrators also involves a lot of specialised library activities

3 1 By job-level the range of job-activities is 1 to 20 for professional assistants and assistant librarians, and it is 5 to 15 for deputy librarians, considering all activities together, i e the range of job-activities decreases as we go to higher job-levels This is also true for specialised library activities and administrative activities

3.2 In the specialised library activities, except for job-level assistant librarians, the mean of activities checked decreases, and in the admini-

strative activities it increases, as we move to higher job-levels. The median of specialised library activities checked decreases, ·and of administrative as well as all activities taken together increases, as we move to higher job-levels.

3.3 The standard deviation for specialised library activities checked decreases as we go to higher job-levels. For administrative activities (except for assistant librarians), as well as for all activities taken together the standard deviation of job-activities performed decreases.

3.4 As inferred from above (para 3.1 to 3.3), in general the proportion of specialised library activities decreases and administrative activities increases in the job, as we go to higher job-levels. However, even in the highest job-level deputy librarians there is considerable proportion of specialised library activities in the job.

4. Highest response, for all respondents for time or importance dimension, about job-activities is same. The top 10 job-activities with highest response included seven administrative and three specialised library activities. The later are at rank 3, 6 and 7.

5.1 As inferred from analysis of job-activities in three dimensions, the librarians in administrative positions have more of administrative and supervisory activities in their job as compared with those in non-administrative positions. Out of the administrative functions, only 'directing' gets a place in the top 20 ranking job-activities, in the job of the non-administrative positions.

5.2 For all positions the administrative function 'directing' gets the first rank, 'housing' gets the last rank out of administrative functions for administrative positions. For non-administrative positions only 'directing' was the administrative function present among the top 20 ranking job-activities.

5.3 Out of the specialised library activities, the activities of the function 'reference' get higher ranks in the job of the administrators, and the activities of the function 'cataloguing and classification' get higher ranks in the job of the non-administrators.

6.1 The job of the professional assistants is closest to the job of librarians in non-administrative positions, except that the professional assistants

have more of supervisory and administrative functions in the job than the non-administrators

6.2 As we move to higher job-levels i e from professional assistants to deputy librarians,

(i) the rank of the administrative and supervisory activities moves higher in the job of the librarians,

(ii) the rank of the specialised library activities moves lower in the job of the librarians,

(iii) the administrative function 'directing' in general gets first rank out of administrative functions, and

(iv) the rank of activities of specialised library function 'cataloguing and classification' moves lower, and it is not a part of the top 20 ranking job-activities list of deputy librarians in all the three dimensions

6.3 Out of the administrative functions 'planning', organising' and 'directing' are common in the three dimensions in the job of professional assistants, except in the time dimension where 'planning' does not get a place in the top 20 ranking job-activity items

6.4 All the eight administrative functions are represented in the top 20 ranking job-activity items, in the job of the assistant and deputy librarians, in all the three dimensions

6.5 For the three job-levels, the lists of top 20 ranking job-activities reveal the following common job-activity items 'responsible for selection of material', three job-activities of the specialised library function 'reference' and two administrative functions 'directing' and 'organising' The activity 'order and check books and periodicals etc ' is missing in the list of importance dimension but is there in the remaining two dimensions Similarly the function 'planning' is missing in the list of time dimension but present in the two other dimensions

7 Comparing all the 19 lists of the top 20 ranking job-activity items

7 1 Five job-activity items are found common, which are 'directing' out of administrative functions, three job-activities of the function 'reference',

and 'order and check books and periodicals etc.';

7.2   All the eight administrative functions get represented in 12 or more lists;

7.3   Poorly represented activities (only seen in 1 to 4 lists) are: 'prepare abstracts', 'route periodicals on request', and 'responsible and/or do editing work', meaning there by that only a few of the librarians are involved in these activities;

7.4   Two of the job-activities do not appear in the lists even once, which are 'responsible and/or do translation work', and 'responsible for printing various lists, stationery etc.' This is indicative of poor translation services, and involvement of only a few professional librarians in printing lists and library stationery;

7.5   'Library automation' was listed by only three persons, indicating that university libraries are yet to utilise automation for library routines.

8.   When major job-functions are ranked with the help of joint time-importance weighted score for administrators, non-administrators, and all respondents :

8.1   Among the specialised library functions, 'cataloguing and classification', 'reference', and 'selection and acquisition' get the first three positions respectively;

8.2   Among the administrative functions, 'directing', 'planning' and 'organising' get the first three positions respectively, except for the non-administrators where at position two and three are the functions 'controlling' and 'housing'.

9.   The respondents expressed their greatest competencies as follows :

9.1   Out of the specialised library functions, 'reference', 'cataloguing and classification', 'documentation', and 'readers' services' (given in the decreasing order of response) have been cited. The 'library automation' received the least response;

9.2   Out of the administrative functions, 'administration', 'public relations', and 'personnel management' are the first three areas (in the decreasing order of response);

9.3 Despite preference for the administrative functions in the three dimensions observed in quantitative analysis, the score for these functions is poor in the greatest competencies, indicating the educational needs of the respondents in the administrative functions,

9.4 'Library automation' received poor score in the greatest competencies In view of increasing interest in the implementation of library automation, INFLIBNET project of the University Grants Commission, and other local and wider area networks, etc, there is a greater need for education in library automation.

10   The respondents expressed their least competencies as follows

10.1 Out of the specialised library functions, 'cataloguing and classification', and 'library automation' are the first two areas, followed by 'library routines' at number three,

10.2 Out of the administrative functions, 'administration' is at rank one, and 'personnel management' and 'planning' share the second position,

10.3 In the least competencies, the administrative functions have received larger response than the greatest competencies, pointing to the greater educational needs in these functions (like the observation in greatest competencies),

10.4 Confirming the earlier observation, greater educational need exists in library automation, as inferred in the least competencies response It ranks number two in the least competencies

11.1 Three chief reasons cited for the greatest as well as the least competencies are interest, experience and training

11.2 The reason 'training' in the greatest competencies (21 51 per cent) and the least competencies (18 42 per cent) shows the value of training for professional librarians The 'lack of training' as reason (of 18 42 per cent) for the least competencies indicates the need for training of professional librarians

11.3 The lack of interest (26 32 per cent), and work of non- professional nature (7 89 per cent) as reason for least competencies, indicates that a number of professional librarians have been entrusted work of a non-professional nature or the work that least interests them Again, such

work may be of a lower cadre or non-professional in nature.

Demand for Courses and Other Data

The questionnaire also devoted to solicit response of the professional librarians regarding their interest in undertaking educational programmes in .IS and other subjects, the type of courses they would be interested in undertaking, the subject areas in which they would like to undertake courses, their interest in advanced LIS courses, i.e. M.Phil./Ph.D., etc. They were also asked to express about the scientific, technical and professional courses they lack, which would have been helpful in the performance of their job, the job-activities for which they feel the LIS school training has not prepared them, their expectations from LIS school in addition to the regular LIS courses offered by them, the LIS courses attended by the respondents during library service, and their suggestions for LIS courses and curricula.

The chapter five gives the analyses in detail of the response received for above questions. This information was specially requested to know their perception about their educational needs, and reaction to their LIS training. After joining a profession, more often the interest in further training is a matter of choice of the professional workers. Thus, the analysis and inference drawn can be helpful to understand the educational needs of the professional librarians. The trends observed as a result of analysis in chapter five have been summarised below :

1.1 A large majority of the respondents in the study (89.47 per cent) are inclined to undertake further training in LIS.

1.2 A large percentage of assistant and deputy librarians (94.44 per cent) are interested in further LIS training.

1.3 All respondents irrespective of job-level and position, upto the age of 40, are interested in undertaking further training in LIS, and the interest decreases after the age of 40. All professional librarians upto the age of 40 (i.e. 23.68 per cent of the respondents in this study) are interested in LIS training.

1.4 The order of preference for type of courses, both for administrators and non-administrators, is workshops/seminars, followed by intensive short term courses and the least regular courses.

1.5 The order of preference for types of courses, for all respondents taken

together, for professional assistants and deputy librarians, is workshops/ seminars, intensive short term courses, and the least regular courses in LIS Among assistant librarians maximum preference is for intensive short term courses, followed by workshops/seminars, and the least regular courses

16 For further training in LIS, analysing the response for each type, the workshops/seminars received maximum response from deputy librarians, intensive short term courses from assistant librarians, and regular courses from professional assistants

17 Lack of interest in further LIS training is maximum among the professional assistants, followed by the groups non-administrators, administrators, assistant and deputy librarians respectively

18 The 'Library automation and information technology' and 'Library administration and management' are the two highly preferred areas for further training in LIS

2.1 Course demands in other subject areas is lesser than LIS among professional librarians (i e 52 63 per cent of the respondents in comparison to 89 47 per cent expressing interest in LIS)

2.2 Like LIS courses, a larger percentage (66 67 per cent) of deputy librarians, are interested in training in other subject areas

2.3 More of administrators are interested in undertaking courses in other subject areas, as compared to non-administrators

2.4 By job-position the interest in training in other subject areas decreased with the increase in age, but by job-level it increases among the assistant and deputy librarians

2.5 Major areas of interest in training in other subject areas are 'automation and information technology', followed by 'administration and management' The observation is similar to that in 'demand for courses in LIS'

3.1 Only 42 11 per cent of the respondents expressed interest in undertaking advanced courses in LIS (i e courses after bachelor or master of LIS, i e M Phil and Ph D in LIS)

3.2   The proportion of administrators and non-administrators in the study, interested in advanced courses in LIS, is not very different (i.e. 42.25 per cent of administrators, compared with 41.86 per cent of non-administrators who are interested).

3.3   The proportion of various job-levels interested in advanced courses in LIS varies. Maximum is 47.22 per cent of assistant librarians, followed by 40.00 per cent of professional assistants, and the least 38.89 per cent of deputy librarians.

3.4   All respondents in the age group upto 30 years are interested in advanced LIS courses. The assistant librarians in the age group 31 to 40 years, th' professional assistants in the age group 41 to 50 years, and the deput librarians in the age group above 50 years, are more interested i: advanced LIS courses.

3.5   The maximum number of respondents interested in advanced LI! courses are in the age group 41 to 50 years, followed by 31 to 40 years above 50 years, and the least in the age group below 30 years.

4.1   In all 36.84 per cent of the respondents feel that they lack training ii scientific, technical and professional courses, which would have beei helpful in their position.

4.2   A larger proportion (43.66 per cent) of administrators lack training ii scientific, technical and professional courses, which would have beei helpful in their position, as compared with (25.58 per cent) of non administrators.

4.3 . Similarly a larger percentage (52.78 per cent) of assistant librarians followed by (38.89 per cent of) deputy librarians, and (26.67 per cent of professional assistants have expressed lack of training in some scientific technical and professional courses, which would have been useful ii their position.

4.4   Most cited areas of scientific, technical and professional courses, which they lack are: 'automation and information technology', followed by 'administration and management'. This again confirms the earlier observations.

5.1   In all 31.58 per cent of respondents feel that LIS school training has not

equipped them for some of the job-activities

5.2   A greater proportion (38 03 per cent) of administrators, in comparison to (20 93 per cent of) non-administrators, feel that LIS school training has not prepared them for some job-activities

5.3   The percentage of professional librarians, who feel that LIS school training has not prepared them for some of the job-activities, increases with the increase in job-level   The percentages are 18 33 per cent of professional assistants, 38 89 per cent of assistant librarians, and 61 11 per cent of deputy librarians

5.4   'Library administration and management' has been cited in 28 85 per cent of response, as the area for which LIS school training has not equipped the professional librarians

5.5   'Library automation and information technology ", ranking second in the area for which LIS school training has not equipped, has been cited in 26 92 per cent of response

5.6   The remaining areas/job-activities include 'indexing and abstracting' with 21 15 per cent of response, 'library routines' with 15 38 per cent of response and other areas/job-activities with 7 69 per cent of response, for which the respondents have expressed that LIS school training has not equipped them

6.1   In all 54 39 per cent of the respondents have expressed their *expectations from LIS schools, in addition to offering regular LIS courses*

6.2   LIS schools should act as clearing house of information, was stated by 25 88 per cent   They expected the LIS school to provide latest and up-to-date information on LIS, to organise lectures, etc

6.3   LIS school should be a place for organising discussions, etc was expressed by 17 65 per cent

6.4   LIS school should offer guidance and counseling for professional development and placement, was the view of 11 76 per cent

7.1   In all 66 67 per cent of respondents attended LIS courses during LIS service

7.2   A larger percentage (74.65 per cent) of administrators, in comparison to (53.49 per cent of) non-administrators attended LIS courses during LIS service.

7.3   Out of various job-levels the maximum 75.10 per cent of assistant librarians, followed by 66.67 per cent of deputy librarians, and the least 61.67 per cent of professional assistants attended LIS courses during library service.

7.4   During library service 45.57 per cent of respondents attended regular LIS courses (i.e. M. L.I.Sc., Ph.D. etc.).

7.5   Short term courses in LIS and related areas were attended by 29.11 per cent of respondents. Computer application in libraries is the chief area of the courses attended by them.

8.1   Out of all, 53.51 per cent of respondents have offered suggestions/ comments on library courses and curricula.

8.2   The LIS school training should be more practice oriented is the suggestion in 29.29 per cent of the response. Another 9.09 per cent of response expects training to be need based (job oriented).

8.3   23.23 per cent of the response suggests that 'library automation and information technology' should be included in LIS school curricula.

8.4   'Library administration and management' should be emphasised in the curricula is the suggestion in 14.14 per cent of response.

Educational Needs

Only 20.18 per cent of the respondents in this study obtained their last professional degree after the year 1984. Out of all the respondents 57.02 per cent passed out their last professional degree before the year 1980. Considering LIS a fast growing discipline, and in view of the change in library practices during the last fifteen years, the knowledge of professional librarians without taking suitable continuing education programmes will remain outdated. Coupled with the fact that the information of a discipline becomes obsolete, further education of the professional librarians becomes more important, to keep them abreast with the growth in LIS.

The professional librarians in this study have cited training as one of

the chief reasons for their greatest as well as least competencies in various job-activities, which gives credence to the thinking that educational need exists This is further confirmed by a majority of respondents (89 47 per cent) by expressing inclination for further training in LIS Among the assistant and deputy librarians this expression was by 94 44 per cent of the group

The interest of the respondents in undergoing further education is further confirmed by the fact that 66 67 per cent of the respondents attended LIS courses during their library service In fact, all professional librarians upto the age of 40, have been found interested in LIS training, after which the interest declines

Nature of Courses for Continuing Education

It has been observed during this study that short courses would be preferred by the professional librarians for further education in LIS The order of preference, both among administrators and non-administrators, is workshops or seminars, followed by intensive short term courses The regular courses as means of further education received the least preference from both the administrators and non-administrators Considering the preference by job-level, the deputy librarians, the professional assistants (as well as all respondents taken together) prefer workshops/seminars, followed by intensive short term courses, and the least regular courses Among the assistant librarians, the maximum preference has been shown for intensive short term courses, and the least for regular courses

Out of all the respondents only 56 14 per cent possess master's degree in LIS, and this includes 5 26 per cent of the respondents who have obtained M Phil /Ph D in LIS Thus, 43 86 per cent of the respondents possess only bachelor's degree in LIS Most of these are likely to go for regular master's course in LIS and some for M Phil /Ph D programmes Those with only bachelor's degree in LIS include professional assistants 32 46 per cent, assistant librarians 7 89 per cent, and deputy librarians 3 51 per cent of the respondents The largest concentration of bachelor's degree holders in LIS is of professional assistants Taking into consideration the present qualifications for recruitment to the post of deputy librarians and assistant librarians, 40 per cent of the respondents are likely to go for regular courses This is further confirmed by the interest in advanced courses expressed by the respondents, as 42 11 per cent of the respondents have expressed interest in undertaking advanced courses in LIS

The interest in undertaking further regular courses is also confirmed by the comparison of the total professional experience and the experience after the last professional degree. The average experience reduced by nearly 2 years when experience after last professional degree is considered. This difference decreases as we go to higher job-levels, i.e. 2.37 years for professional assistants, 1.37 years for assistant librarians, and there is no difference for deputy librarians. Thus the tendency to opt for regular courses is higher at the lower job-levels. It is obvious as the qualification possessed at lower job-levels is lesser.

The interest and tendency to go for regular courses is also proved by the fact that 45.57 per cent of the respondents attended regular LIS courses during library service.

As already observed the qualification of professional librarians is higher in other subjects than in LIS, as 91.23 per cent of them possess master's degree in other subject, whereas in LIS only 56.14 per cent have master's degree. Similarly, in other subjects 8.77 per cent of the respondents have obtained M.Phil./Ph.D., whereas in LIS only 5.26 per cent have done so. Despite this, there is course demand in other subject areas, though it is less than that in LIS. Nearly half of the respondents are interested in training in other subject areas.

Contents of Continuing Education

The response to the questionnaire, analysed in chapters three, four and five, has been used to infer areas in which the respondents will be interested in undertaking further education. The inference has been drawn with the help of direct expression of interest in undertaking courses in various subject areas, as well as the indirect evidence of interest or lack of competence, etc.

The most sought after area for continuing education is 'administration and management'. As evident, a large number of university library's professional librarians (62.28 per cent) perform administrative and managerial activities. Among the top ten job-activities getting highest response, seven are administrative functions. All the eight administrative functions get represented in 12 or more of the 19 lists of top 20 ranking job-activities, based on analysis of various job-dimensions. This is indicative of greater importance attached to and greater amount of time devoted to administrative activities in the job by the professional librarians.

Despite the value of administrative activities in the job of professional librarians, as observed in the quantitative analysis, the score for the admini-

strative functions is poor in the response to the greatest competencies Similarly, the administrative functions have received a larger response for the least competencies as compared to the greatest competencies This points out towards a greater educational need in the administrative functions The 'library administration and management' is the area getting 25 16 per cent of response when interest in undertaking further courses in LIS was explored This is the second highest response for any area in LIS courses, (highest being 25 81 per cent for 'library automation and information technology')

In undertaking further courses in other subject area again, the respondents ranked the area 'administration and management' at number two Similarly in expressing the lack of having training in other scientific, technical and professional courses, which could have been helpful in performing the job, the respondents placed 'administration and management' at number two

The observation is further substantiated, as the 28 85 per cent of the response cited 'library administration and management' as the area for which LIS school training has not equipped the respondents This area was ranked number one Analysing the suggestions of the respondents for LIS courses and curricula, 14 14 per cent of the response suggested to lay greater emphasis on 'library administration and management' in LIS school curricula

Taking into consideration the direct, as well as indirect response, it is inferred that the professional librarians find themselves weak in administration and management function in libraries and an overwhelming demand for courses in this area exists Thus the 'administration and management' of libraries is an area fit for continuing education for professional librarians

'Library automation and information technology' is another area of major interest for continuing education programmes for the professional librarians in the universities, although library automation is yet to take over library routines in the university libraries

In the quantitative analysis of library activities, only a few of the professional librarians have stated 'library automation' as an activity in their job In the qualitative analysis of job-activities in which the respondents are having greatest competence, as obvious, the activity received poor score, attracting only 1 63 per cent of response In comparison it received 18 60 per cent response in the job-activities in which the respondents are least competent, ranking equal to 'library administration' With this background, it is evident that the professional librarians in the universities are conscious of their weakness

in the area of 'library automation'.

Considering the expression of the respondents in respect of course demands in LIS, 'library automation and information technology' received the highest score (25.81 per cent of response). Again in the analysis of course demands in other subject areas, 'automation and information technology' ranked number one (with 30.00 per cent of response). This indicates that 'automation and information technology' is highly preferred as the area in which the professional librarians will like to undertake continuing education programmes.

The observation is further strengthened during analysis of the response regarding scientific, technical and professional areas in which the respondents lack training, and which could have been helpful to their job in the library. The 'automation and information technology' is ranked number one in the response. The response is similar when the respondents expressed areas in which LIS school training has not equipped them, where 'library automation and information technology' ranks number two.

The interest in 'library automation' is also evident among the professional librarians, as a majority of them (86.95 per cent of those who attended short term courses) attended courses in the area 'computer application in libraries', including CDS/ISIS, MINISIS, etc. Again, while offering suggestions for LIS school courses and curricula, 23.23 per cent of the response suggested inclusion of the following areas in LIS curricula: computer applications in libraries, latest techniques in libraries, and information technology.

In view of the INFLIBNET programme of the University Grants Commission (India), wherein a large number of university libraries through out the country will form a node in the network, considering the growth of other local area and wider area networks (as the library networks in Delhi, Calcutta, etc.), and with the increase in availability of large databases and periodicals as well as books in machine readable format (on CD ROM, etc), probably the professional librarians in the universities wish to equip themselves with the knowledge of automation and information technology. This is evident during the analysis in this study.

The above two areas, i.e. library administration and management, and library automation and information technology, are the major subjects which will attract a large number of professional librarians, if the continuing education programmes are offered. A number of other areas have been listed in the overview of observations in the earlier part of this chapter, which have potential to attract

the professional librarians in the universities for continuing education, like reference and information services, cataloguing and classification, library routines, abstracting and indexing, etc. Some other areas, like systems analysis, non print material form part of the job of only a few professional librarians but may prove to be suitable for continuing education programmes, however, these also form part of the two major areas library administration and management, and library automation and information technology, discussed above

Considering the background subject qualifications of the professional librarians, who chiefly possess education in the disciplines of arts (including social sciences), appreciation programmes in science and commerce may be considered as part of the reorientation courses for professional librarians

LIS Schools and Training

Taking into consideration the inference drawn above on educational needs of professional librarians working in the universities, it is obvious that continuing education has to be systematically planned and effectively designed and implemented Various agencies can be employed to impart continuing education to professional librarians, e g LIS schools, LIS associations, and other institutions including INSDOC, DRTC, academic staff colleges working in the universities, etc

The LIS schools and academic staff colleges working in the universities are specially suitable for providing continuing education programmes for professional librarians working in the universities because of the following factors [3]

1   UGC has already created academic staff colleges in the universities for offering reorientation programmes to faculty members and librarians These can associate with university librarians and LIS faculty for this purpose

2   LIS schools are available all over India These can use the existing resources, as well as cooperate at regional level among themselves to offer adequate continuing education programmes

3   Being located in the universities, the academic staff colleges and the LIS schools can avail of the services of specialists in various disciplines, e g management, computers, statistics, etc , available on the campus

4. Passed out graduates retain a sense of attachment with the LIS schools and teachers. This is a suitable bond which can be used for effective motivation of the professional librarians.

The respondents' reaction to their LIS training was explored to check its impact on their job in the libraries, specially to find out the job-activities for which they feel that LIS training did not prepare them. As expected, the percentage of such professional librarians, who feel that LIS training has not equipped them for some of the job-activities increased with the increase in job-level. As stated in this chapter a number of areas could be identified for continuing education in this response, viz. library administration and management, library automation and information technology, indexing and abstracting, library routines, etc.

The questionnaire also sought to know the expectations of the professional librarians from LIS schools, in addition to holding seminars/ workshops, and LIS regular training programmes. The respondents expected LIS schools to perform a number of other functions. Chiefly they expect LIS schools to act as clearing house of information, to act as a place for organising lectures and discussions, and to offer guidance and counseling for professional development and placement. Thus as expected by the professional librarians in the university libraries, the LIS schools could play a more active role in human resource development, rather than providing only training programmes. In the suggestions for courses and curricula, the respondents have stressed the importance of training, with emphasis on practical training in LIS school. Some of them have suggested that LIS courses and curricula should be need based. The response regarding specific areas in LIS has already been discussed above.

Limitations, and Suggestions for Extension of Study

It is obvious that a study of this kind has to be limited in many ways due to various constraints i.e. time, human resource involvement, finance, etc. Moreover investigation in any area is an ongoing phenomenon. Where one stops, the others in the discipline (and even other disciplines) pick-up areas for further extension and refinement of results drawn. In brief, the limitations of the present study and likely areas for further have been stated below.

The study has to be restricted geographically and in terms of population covered in the study, the size of the sample, etc. Even the methods of collecting, analysing and presenting data have to be restricted. Some of the chief limitations in the present study are as follows :

1   The study was confined only to university libraries in the state of Rajasthan and Delhi. Only five university libraries were selected in the sample, after excluding the libraries of deemed to be universities institutions of national importance awarding degrees, and the universities established in 1985 or later. The intention has been to select university libraries of similar nature and to exclude libraries with small collection, scanty services, and with a few professional librarians among the staff.

2   The population in the study constituted of professional librarians only, where the term 'professional librarian' has been defined to mean a library worker at the level of professional assistant (senior technical assistant) or above, and who possesses at least a bachelor's degree in LIS. In effect professional librarians working at the job-level professional assistant (senior technical assistant), assistant librarian, deputy librarian, and university librarian constitute the population for this study. All eligible professional librarians working in the five universities in the sample have been taken as population in this study.

3   The collection of data was done with the help of a questionnaire. Although informal discussion and interviews were conducted with the respondents in Delhi and Jaipur as a help in understanding their response, but the same have not been fully used.

4   The size of the questionnaire had to be confined to a few pages, so as to have sufficient response. But for this reason, the schedule of job-activities could be further enlarged, and along with the questions relating to course areas a schedule could have been added for the convenience of the respondents.

5   The scope of the collection of data could have been further enlarged by interviewing library administrators, LIS faculty, etc. to know their opinion on educational needs of professional librarians.

Taking into consideration the results of this study and the limitations, the work in this area can be further extended by admitting lesser limitations than the present study. The work can be further continued by adopting a different set of institutions, population, etc. to make the results more universal, or by changing the method of collection of data to make the inferences more representative of the population, etc. Some likely ways of extending the study have been given below.

1.   The study could be repeated by taking up other than university libraries in the sample, or a larger number of libraries. This can also be carried out with a change in geographical distribution of institutions covered.

2.   The work can be further extended by taking up population from within a specific job-level, in place of all the job-levels of professional librarians. There could be a separate study of the job-level professional assistants. Likewise, there could be separate studies of professional librarians who work in administrative position and those who work in non-administrative positions.

3.   A different dimension to the study can be to carry out a study of library managers to evaluate their opinion about the educational needs of professional librarians, and their expectations from the entrant to the profession.

4.   Library authorities and parent bodies could be involved in the study to find out provision for continuing education of professional librarians, and type of support available from administrators for personnel development vis-a-vis educational needs of the professional librarians.

5.   During the analysis of competencies of the professional librarians it has been observed that, in addition to training, experience and interest are important reasons for lack of competence or otherwise. Respondents have also expressed that they are performing non-professional duties. The area of professional and non-professional activities in the library is also ripe for further analysis even otherwise, as application of information technology in libraries can potentially alter the role played by professional librarians. Investigation in this area can lead to more helpful job-description at various job-levels in the libraries.

6.   During the analysis of job-activities, it has been observed that specialised library activities form an important part of the job-description of administrators. It may be as a result of staff shortages or for some other reasons, that administrators are operating at a non-administrative level. This aspect can be further investigated, to improve the effective utilisation of professional librarians working in administrative position.

The LIS profession is facing some intrinsic problems as perceived during the present study. There is a tendency towards fission in the profession. The overwhelming demand for knowledge in administration and management, as

well as automation and information technology, is a pointer towards this tendency. The profession needs to consider as to how much these areas need to be introduced in the regular LIS courses and for how much we may depend upon other disciplines. This aspect needs further investigation, as it potentially can have an impact on the professional boundaries and specialisation by the professional librarians.

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APPENDIX TABLE 1

**NUMBER OF RESPONDENTS CHECKING JOB-ACTIVITY ITEMS
ACCORDING TO TIME & IMPORTANCE APPLICABILITY**

SL NO	NAME OF ACTIVITY	TIME MOST	SUBSTANTIAL	LEAST	IMPORTANCE MOST	SUBSTANTIAL	LEAST	TOTAL FOR TIME & IMPORTANCE NO	RANK	%
	Indexing & Abstracting									
1	Scan Literature	9	9	7	9	12	4	25	20	21 93
2	Prepare Abstracts	5	1	3	4	2	3	9	30	7 89
3	Other	2	0	1	2	0	1	3	37	2 63
	Selection & Acquisition									
4	Selection of Materials, Responsible for	8	7	5	12	6	2	20	25	17 54
5	Ordering Books and Periodicals	15	13	6	22	7	5	34	14	29 82
6	Procuring Books and Periodicals	16	10	5	21	7	3	31	15	27 19
7	Maintaining Records	9	8	5	10	9	3	22	21	19 3
8	Others	3	2	2	1	5	1	7	31	6 14

Cataloguing & Classification

9.	Books Classification	18	17	8	26	14	3	43	7	37.72
10.	Books Cataloguing	13	19	8	19	15	6	40	11	35.09
11.	Subject Headings	5	12	5	6	13	3	22	21	19.30
12.	Catalogue and Other Record Maintenance	11	18	9	13	18	7	38	12	33.33
13.	Classify / Catalogue Technical Reports	7	9	6	11	6	5	22	21	19.30
14.	Others	0	2	0	1	1	0	2	39	1.75
	Circulation / Lending									
15.	Circulate Holding / Requests	7	10	11	7	14	7	28	16	24.56
16.	Circulate ILL Material	4	7	7	4	7	7	18	26	15.79
17.	Route Periodicals on Request	1	6	11	7	3	8	18	26	15.79
18.	Others	2	0	1	2	0	1	3	37	2.63
	Maintenance of Holdings									
19.	Stock Preservation, Responsible for	6	10	5	8	11	2	21	24	18.42

Appendix Table 1 Continued

20	Binding of Documents, Supervise	4	13	11	5	14	9	28	16	24.56
21	Weeding Out-dated Publications	6	3	7	3	5	8	16	28	14.04
22	Others	2	2	2	2	2	2	6	32	5.26
	Reference									
23	Reference Service, Responsible for	23	13	18	31	12	11	54	3	47.37
24	Comp of Bibliographies, Responsible for	11	8	8	14	10	3	27	18	23.68
25	Instructions on Information Sources	15	20	14	16	21	12	49	6	42.98
26	Reader's Orientation	6	9	11	7	10	9	26	19	22.81
27	Others	1	3	1	2	2	1	5	34	4.39
	Other Activities									
28.	Translation Work, Responsible/Do	1	0	3	2	0	2	4	35	3.51
29	Editing Work, Responsible/Do	6	1	5	6	3	3	12	29	10.53
30	Printing Stationery Lists, Responsible for	3	1	2	1	2	3	6	32	5.26

31.	Others 1	1	1	2	1	2	1	4	35	3.51
32.	Others 2	0	1	0	0	1	0	1	40	0.88
33-35	Others 3-5	0	0	0	0	0	0	0	41	0
	General Administration & Management									
36.	Planning	16	20	15	31	11	9	51	4	44.74
37.	Organising	13	25	18	19	28	9	56	2	49.12
38.	Staffing	7	9	22	9	18	11	38	12	33.33
39.	Directing	31	28	18	42	28	7	77	1	67.54
40.	Coordinating	10	16	24	10	26	14	50	5	43.86
41.	Controlling	6	14	22	13	19	10	42	8	36.84
42.	Representing	4	13	25	10	20	12	42	8	36.84
43.	Housing	2	12	28	3	22	17	42	8	36.84

MEAN NUMBER OF RESPONDENTS   24.23*

APPENDIX TABLE 2

JOB-ACTIVITY ITEMS RANKING ACCORDING TO WEIGHTED TIME SCORE FOR ALL RESPONDENTS

SL. NO	NAME OF ACTIVITY	WEIGHTED SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	79	16
2.	Prepare Abstracts	31	30
3.	Others	11	35
	Selection & Acquisition		
4	Selection of Materials, Responsible for	66	23
5	Ordering Books and Periodicals	120	9
6.	Procuring Books and Periodicals	115	11
7	Maintaining Records	74	18
8.	Others	23	31
	Cataloguing & Classification		
9	Books Classification	149	5
10	Books Cataloguing	130	7
11	Subject Headings	66	23
12.	Catalogue and Other Record Maintenance	118	10
13	Classify / Catalogue Technical Reports	68	21
14	Others	6	39
	Circulation / Lending		
15	Circulate Holding /Requests	76	17
16	Circulate ILL Material	48	26
17	Route Periodicals on Request	34	29
18	Others	11	35

Maintenance of Holdings

19.	Stock Preservation, Responsible for	65	25
20.	Binding of Documents, Supervise	70	20
21.	Weeding Out-dated Publications	46	27
22.	Others	18	33

Reference

23.	Reference Service, Responsible for	172	2
24	Comp. of Bibliographies, Responsible for	87	13
25.	Instructions on Information Sources	149	5
26.	Reader's Orientation	68	21
27.	Others	15	34

Other Activities

28.	Translation Work, Responsible/Do	8	38
29.	Editing Work, Responsible/Do	38	28
30.	Printing Stationery & Lists, Responsible for	20	32
31.	Others 1	10	37
32.	Others 2	3	40
33 - 35	Others 3 - 5	0	41

General Administration & Management

36.	Planning	155	4
37.	Organising	158	3
38.	Staffing	84	14
39.	Directing	257	1
40.	Coordinating	122	8
41.	Controlling	94	12
42.	Representing	84	14
43.	Housing	72	19

MEAN		70.23
STANDARD DEVIATION		57.153

APPENDIX TABLE 3
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY TYPE OF POSITION : ADMINISTRATORS

SL. NO	NAME OF THE JOB-ACTIVITY	MOST	SUBS-TANTIAL	LEAST	WEIGHTED SCORE	RANK
	Indexing & Abstracting					
1	Scan Literature	6	7	7	58	15
2	Prepare Abstracts	2	0	3	13	30
3	Others	1	0	1	6	36
	Selection & Acquisition					
4	Selection of Materials, Responsible for	7	6	3	56	16
5	Ordering Books and Periodicals	8	11	4	77	11
6	Procuring Books and Periodicals	8	5	5	60	14
7	Maintaining Records	4	6	4	42	22
8	Others	1	1	1	9	32
	Cataloguing & Classification					
9	Books Classification	10	7	7	78	10
10	Books Cataloguing	6	7	4	55	17
11	Subject Headings	4	4	2	34	24
12	Catalogue and Other Record Maintenance	5	7	5	51	19
13	Classify / Catalogue Technical Reports	3	5	4	34	24
14	Others	0	1	0	3	38
	Circulation / Lending					
15	Circulate Holding / Requests	4	4	8	40	23
16	Circulate ILL Material	1	4	7	24	28

17.	Route Periodicals on Request	0	2	11	17	29
18.	Others	0	0	0	0	40

Maintenance of Holdings

19.	Stock Preservation, Responsible for	5	8	5	54	18
20.	Binding of Documents, Supervise	2	9	9	46	21
21.	Weeding Out-dated Publications	4	2	6	32	26
22.	Others	0	2	0	6	36

Reference

23.	Reference Service, Responsible for	19	9	16	138	4
24.	Comp. of Bibliographies, Responsible for	10	4	8	70	13
25.	Instructions on Information Sources	10	14	13	105	6
26.	Reader's Orientation	5	5	10	50	20
27.	Others	1	1	0	8	33

Other Activities

28.	Translation Work, Responsible/Do	1	0	2	7	34
29.	Editing Work, Responsible/Do	5	1	4	32	26
30.	Printing Stationery & Lists, Responsible for	2	0	2	12	31
31.	Others 1	1	0	2	7	34
32.	Others 2	0	1	0	3	38
33-35	Others 3 - 5	0	0	0	0	40

General Administration & Management

36.	Planning	16	20	14	154	3
37.	Organising	13	25	17	157	2
38.	Staffing	7	9	22	84	8

39	Directing	30	25	15	240	1
40	Coordinating	10	16	23	121	5
41	Controlling	6	13	22	91	7
42	Representing	4	12	24	80	9
43	Housing	2	11	28	71	12

| | MEAN | | | | 51 744 | |
| | STANDARD DEVIATION | | | | 51.57 | |

APPENDIX TABLE 4
JOB-ACTIVITIES ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY TYPE OF POSITION : NON-ADMINISTRATORS

SL. NO	NAME OF THE JOB-ACTIVITY	TIME	SCORE		WEIGHTED SCORE	RANK
		MOST	SUB-STANTIAL	LEAST		
	Indexing & Abstracting					
1	Scan Literature	3	2	0	21	14
2	Prepare Abstracts	3	1	0	18	15
3	Others	1	0	0	5	29
	Selection & Acquisition					
4	Selection of Materials, Responsible for	1	1	2	10	25
5	Ordering Books and Periodicals	7	2	2	43	6
6.	Procuring Books and Periodicals	8	5	0	55	4
7	Maintaining Records	5	2	1	32	10
8.	Others	2	1	1	14	20
	Cataloguing & Classification					
9	Books Classification	8	10	1	71	2
10	Books Cataloguing	7	12	4	75	1
11	Subject Headings	1	8	3	32	10

12.	Catalogue and Other Record Maintenance	6	11	4	67	3
13.	Classify / Catalogue Technical Reports	4	4	2	34	8
14.	Others	0	1	0	3	31
	Circulation / Lending					
15.	Circulate Holding /Requests	3	6	3	36	7
16.	Circulate ILL Material	3	3	0	24	12
17.	Route Periodicals on Request	1	4	0	17	17
18.	Others	2	0	1	11	23
	Maintenance of Holdings					
19.	Stock Preservation, Responsible for	1	2	0	11	23
20.	Binding of Documents, Supervise	2	4	2	24	12
21.	Weeding Out-dated Publications	2	1	1	14	20
22.	Others	2	0	2	12	22
	Reference					
23.	Reference Service, Responsible for	4	4	2	34	8
24.	Comp. of Bibliographies, Responsible for	1	4	0	17	17
25.	Instructions on Information Sources	5	6	1	44	5
26.	Reader's Orientation	1	4	1	18	15
27.	Others	0	2	1	7	27
	Other Activities					
28.	Translation Work, Responsible/Do	0	0	1	1	34
29.	Editing Work, Responsible/Do	1	0	1	6	28
30.	Printing Stationery & Lists, Responsible for	1	1	0	8	26
31.	Others 1	0	1	0	3	31

| 32-35 | Others 2 - 5 | 0 | 0 | 0 | 0 | 39 |

General Administration & Management

36.	Planning	0	0	1	1	34
37.	Organising	0	0	1	1	34
38	Staffing	0	0	0	0	39
39.	Directing	1	3	3	17	17
40	Coordinating	0	0	1	1	34
41.	Controlling	0	1	0	3	31
42.	Representing	0	1	1	4	30
43.	Housing	0	1	0	1	34

| | MEAN | | | | | 18.49 |
| | STANDARD DEVIATION | | | | | 20.195 |

APPENDIX TABLE 5
JOB-ACTIVITIES ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY JOB-LEVEL : PROFESSIONAL ASSISTANTS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	34	16
2.	Prepare Abstracts	20	26
3	Others	5	34
	Selection & Acquisition		
4	Selection of Materials, Responsible for	27	22
5.	Ordering Books and Periodicals	66	7
6	Procuring Books and Periodicals	77	4
7.	Maintaining Records	47	11
8.	Others	14	29
	Cataloguing & Classification		
9.	Books Classification	98	1

10.	Books Cataloguing	88	2
11.	Subject Headings	34	16
12.	Catalogue and Other Record Maintenance	86	3
13.	Classify / Catalogue Technical Reports	45	12
14.	Others	3	36

Circulation / Lending

15.	Circulate Holding /Requests	54	9
16.	Circulate ILL Material	36	13
17.	Route Periodicals on Request	26	24
18.	Others	11	30

Maintenance of Holdings

19.	Stock Preservation, Responsible for	36	13
20.	Binding of Documents, Supervise	48	10
21.	Weeding Out-dated Publications	28	20
22.	Others	10	31

Reference

23.	Reference Service, Responsible for	65	8
24.	Comp. of Bibliographies, Responsible for	34	16
25.	Instructions on Information Sources	67	6
26.	Reader's Orientation	36	13
27.	Others	7	32

Other Activities

28.	Translation Work, Responsible/Do	2	38
29.	Editing Work, Responsible/Do	4	35
30.	Printing Stationery & Lists, Responsible for	3	36
31. - 35	Others 1 - 5	0	39

General Administration & Management

36.	Planning	23	25
37.	Organising	30	19
38.	Staffing	7	32
39.	Directing	77	4
40.	Coordinating	27	22
41.	Controlling	28	20

42.	Representing	18	27
43.	Housing	18	27

	MEAN	31 139	
	STANDARD DEVIATION	27 4	

APPENDIX TABLE 6
JOB-ACTIVITIES ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS

SL. NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
	Indexing & Abstracting		
1	Scan Literature	18	24
2.	Prepare Abstracts	1	39
3	Others	5	33
	Selection & Acquisition		
4	Selection of Materials, Responsible for	21	21
5	Ordering Books and Periodicals	46	8
6.	Procuring Books and Periodicals	35	13
7	Maintaining Records	27	17
8.	Others	5	33
	Cataloguing & Classification		
9	Books Classification	50	7
10	Books Cataloguing	36	12
11	Subject Headings	27	17
12.	Catalogue and Other Record Maintenance	29	16
13	Classify / Catalogue Technical Reports	22	20
14	Others	3	35

Circulation / Lending

15.	Circulate Holding /Requests	21	21
16.	Circulate ILL Material	15	27
17.	Route Periodicals on Request	10	28
18.	Others	0	40

Maintenance of Holdings

19.	Stock Preservation, Responsible for	19	23
20.	Binding of Documents, Supervise	16	26
21.	Weeding Out-dated Publications	7	30
22.	Others	3	35

Reference

23.	Reference Service, Responsible for	88	1
24.	Comp. of Bibliographies, Responsible for	46	8
25.	Instructions on Information Sources	63	5
26.	Reader's Orientation	34	15
27.	Others	3	35

Other Activities

28.	Translation Work, Responsible/Do	6	31
29.	Editing Work, Responsible/Do	17	25
30.	Printing Stationery & Lists, Responsible for	6	31
31.	Others 1	9	29
32.	Others 2	3	35
33 - 35	Others 3 - 5	0	40

General Administration & Management

36.	Planning	74	4
37.	Organising	82	3
38.	Staffing	44	10
39.	Directing	85	2
40.	Coordinating	51	6
41.	Controlling	43	11
42.	Representing	35	13
43.	Housing	24	19

MEAN	26.26
STANDARD DEVIATION	24.68

APPENDIX TABLE 7
JOB-ACTIVITIES ITEMS RANKING
ACCORDING TO WEIGHTED TIME SCORE
BY JOB-LEVEL : DEPUTY LIBRARIANS

SL NO	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME SCORE	RANK
	Indexing & Abstracting		
1	Scan Literature	24	9
2	Prepare Abstracts	1	26
3	Others	1	26
	Selection & Acquisition		
4	Selection of Materials, Responsible for	19	10
5	Ordering Books and Periodicals	8	16
6	Procuring Books and Periodicals	5	20
7	Maintaining Records	0	34
8	Others	4	22
	Cataloguing & Classification		
9	Books Classification	1	26
10	Books Cataloguing	1	26
11	Subject Headings	3	23
12	Catalogue and Other Record Maintenance	1	26
13	Classify / Catalogue Technical Reports	3	23
14	Others	0	34
	Circulation / Lending		
15	Circulate Holding /Requests	1	26
16	Circulate ILL Material	0	34
17	Route Periodicals on Request	0	34
18	Others	0	34
	Maintenance of Holdings		
19	Stock Preservation, Responsible for	12	13

20.	Binding of Documents, Supervise	8.	16
21.	Weeding Out-dated Publications	11	14
22.	Others	3	23

Reference

23.	Reference Service, Responsible for	19	10
24.	Comp. of Bibliographies, Responsible for	9	15
25.	Instructions on Information Sources	15	12
26.	Reader's Orientation	8	16
27.	Others	5	20

Other Activities

28.	Translation Work, Responsible/Do	0	34
29.	Editing Work, Responsible/Do	7	19
30.	Printing Stationery & Lists, Responsible for	1	26
31.	Others 1	1	26
32. - 35	Others 2 - 5	0	34

General Administration & Management

36.	Planning	57	2
37.	Organising	46	4
38.	Staffing	33	6
39.	Directing	61	1
40.	Coordinating	48	3
41.	Controlling	33	6
42.	Representing	35	5
43.	Housing	32	8

MEAN	12.00	
STANDARD DEVIATION	16.78	

APPENDIX TABLE 8
JOB-ACTIVITY ITEMS RANKING ACCORDING TO
WEIGHTED IMPORTANCE SCORE FOR ALL RESPONDENTS

SL. NO	NAME OF JOB ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	85	17
2.	Prepare Abstracts	29	30
3	Others	11	37
	Selection & Acquisition		
4	Selection of Materials, Responsible for	80	19
5.	Ordering Books and Periodicals	136	9
6.	Procuring Books and Periodicals	129	11
7	Maintaining Records	80	19
8.	Others	21	31
	Cataloguing & Classification		
9	Books Classification	175	5
10	Books Cataloguing	146	7
11	Subject Headings	72	25
12.	Catalogue and Other Record Maintenance	126	12
13	Classify / Catalogue Technical Reports	78	21
14	Others	8	39
	Circulation / Lending		
15	Circulate Holding /Requests	84	18
16	Circulate ILL Material	48	27
17	Route Periodicals on Request	52	26
18	Others	11	37
	Maintenance of Holdings		
19	Stock Preservation, Responsible for	75	23
20	Binding of Documents, Supervise	76	22

21.	Weeding Out-dated Publications	38	28
22.	Others	18	32

Reference

23.	Reference Service, Responsible for	202	2
24.	Comp. of Bibliographies, Responsible for	103	15
25.	Instructions on Information Sources	155	6
26.	Reader's Orientation	74	24
27.	Others	17	33

Other Activities

28.	Translation Work, Responsible/Do	12	35
29.	Editing Work, Responsible/Do	32	29
30.	Printing Stationery & Lists, Responsible for	14	34
31.	Others 1	12	35
32.	Others 2	3	40
33 -35	Others 3 - 5	0	41

General Administration & Management

36.	Planning	197	3
37.	Organising	188	4
38.	Staffing	110	14
39.	Directing	301	1
40.	Coordinating	142	8
41.	Controlling	132	10
42.	Representing	122	13
43.	Housing	98	16

MEAN	81.21
STANDARD DEVIATION	67.99

APPENDIX TABLE 9
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED IMPORTANCE SCORE
BY TYPE OF POSITION : ADMINISTRATORS

SL.	NAME OF THE JOB-ACTIVITY	IMPORTANCE SCORE			WEIGHTED SCORE	RANK
		MOST SUBS-TANTIAL		LEAST		
	Indexing & Abstracting					
1.	Scan Literature	6	10	4	64	17
2.	Prepare Abstracts	1	1	3	11	30
3.	Others	1	0	1	6	36
	Selection & Acquisition					
4	Selection of Materials, Responsible for	11	5	0	70	14
5	Ordering Books and Periodicals	13	7	3	89	12
6.	Procuring Books and Periodicals	11	4	3	70	14
7	Maintaining Records	5	6	3	46	23
8.	Others	1	2	0	11	30
	Cataloguing & Classification					
9	Books Classification	16	5	3	98	10
10	Books Cataloguing	8	6	3	61	18
11	Subject Headings	4	5	1	36	25
12	Catalogue and Other Record Maintenance	5	8	4	53	21
13	Classify / Catalogue Technical Reports	6	3	3	42	24
14	Others	1	0	0	5	38
	Circulation / Lending					
15	Circulate Holding /Requests	5	6	5	48	22
16	Circulate ILL Material	2	3	7	26	27

17.	Route Periodicals on Request	4	2	7	33	26
18.	Others	0	0	0	0	40

Maintenance of Holdings

19.	Stock Preservation, Responsible for	8	8	2	66	16
20.	Binding of Documents, Supervise	3	11	6	54	20
21.	Weeding Out-dated Publications	2	3	7	26	27
22.	Others	0	2	0	6	36

Reference

23.	Reference Service, Responsible for	26	9	9	166	4
24.	Comp. of Bibliographies, Responsible for	11	8	3	82	13
25.	Instructions on Information Sources	12	15	10	115	8
26.	Reader's Orientation	6	7	7	58	19
27.	Others	2	0	0	10	33

Other Activities

28.	Translation Work, Responsible/Do	2	0	1	11	30
29.	Editing Work, Responsible/Do	5	2	3	24	29
30.	Printing Stationery & Lists, Responsible for	1	0	3	8	35
31.	Others 1	1	1	1	9	34
32.	Others 2	0	1	0	3	39
33 - 35	Others 3 - 5	0	0	0	0	40

General Administration & Management

36.	Planning	31	11	8	196	2
37.	Organising	19	28	8	187	3
38.	Staffing	9	18	11	110	9
39.	Directing	41	24	5	282	1
40.	Coordinating	10	25	14	139	5

41	Controlling		12	19	10	127	6
42	Representing		10	19	11	118	7
43	Housing		3	21	17	95	11

| | MEAN | 61 88 |
| | STANDARD DEVIATION | 62.87 |

APPENDIX TABLE 10
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED IMPORTANCE SCORE
BY TYPE OF POSITION : NON-ADMINISTRATORS

SR. NO	NAME OF THE JOB-ACTIVITY	IMPORTANCE SCORE			WEIGHTED SCORE	RANK
		MOST	SUBS- TANTIAL	LEAST		
	Indexing & Abstracting					
1.	Scan Literature	3	2	0	21	14
2.	Prepare Abstracts	3	1	0	18	18
3	Others	1	0	0	5	29
	Selection & Acquisition					
4	Selection of Materials, Responsible for	1	1	2	10	23
5	Ordering Books and Periodicals	9	0	2	47	5
6.	Procuring Books and Periodicals	10	3	0	59	4
7	Maintaining Records	5	3	0	34	11
8.	Others	0	3	1	10	23
	Cataloguing & Classification					
9	Books Classification	10	9	0	77	2
10	Books Cataloguing	11	9	3	85	1
11	Subject Headings	2	8	2	36	7

12.	Catalogue and Other Record Maintenance	8	10	3	73	3
13.	Classify / Catalogue Technical Reports	5	3	2	36	7
14	Others	0	1	0	3	32
	Circulation / Lending					
15.	Circulate Holding /Requests	2	8	2	36	7
16.	Circulate ILL Material	2	4	0	22	12
17.	Route Periodicals on Request	3	1	1	19	16
18.	Others	2	0	1	11	22
	Maintenance of Holdings					
19.	Stock Preservation, Responsible for	0	3	0	9	25
20.	Binding of Documents, Supervise	2	3	3	22	12
21.	Weeding Out-dated Publications	1	2	1	12	20
22.	Others	2	0	2	12	20
	Reference					
23.	Reference Service, Responsible for	5	3	2	36	7
24.	Comp. of Bibliographies, Responsible for	3	2	0	21	14
25.	Instructions on Information Sources	4	6	2	40	6
26.	Reader's Orientation	1	3	2	16	19
27.	Others	0	2	1	7	27
	Other Activities					
28.	Translation Work, Responsible/Do	0	0	1	1	36
29.	Editing Work, Responsible/Do	1	1	0	8	26
30.	Printing Stationery & Lists, Responsible for	0	2	0	6	28
31.	Others 1	0	1	0	3	32

Appendix Table 10 Continued

32-35	Others 2 - 5	0	0	0	0	39
	General Administration & Management					
36.	Planning	0	0	1	1	36
37.	Organising	0	0	1	1	36
38.	Staffing	0	0	0	0	39
39.	Directing	1	4	2	19	16
40.	Coordinating	0	1	0	3	32
41.	Controlling	1	0	0	5	29
42.	Representing	0	1	1	4	31
43.	Housing	0	1	0	3	32
	MEAN				19.33	
	STANDARD DEVIATION				21.90	

APPENDIX TABLE 11
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED IMPORTANCE SCORE
BY JOB-LEVEL : PROFESSIONAL ASSISTANTS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	38	15
2.	Prepare Abstracts	22	24
3.	Others	5	37
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	29	21
5.	Ordering Books and Periodicals	82	5
6.	Procuring Books and Periodicals	83	4
7.	Maintaining Records	53	10
8.	Others	10	33
	Cataloguing & Classification		
9.	Books Classification	104	1
10.	Books Cataloguing	93	2
11.	Subject Headings	40	13
12.	Catalogue and Other Record Maintenance	90	3
13.	Classify / Catalogue Technical Reports	51	11
14.	Others	3	38
	Circulation / Lending		
15.	Circulate Holding /Requests	60	9
16.	Circulate ILL Material	30	19
17.	Route Periodicals on Request	30	19
18.	Others	11	31
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	34	17
20.	Binding of Documents, Supervise	44	12

Appendix Table 11 Continued

21.	Weeding Out-dated Publications	16	27
22.	Others	10	33
	Reference		
23.	Reference Service, Responsible for	67	7
24.	Comp of Bibliographies, Responsible for	40	13
25.	Instructions on Information Sources	67	7
26.	Reader's Orientation	24	23
27.	Others	7	35
	Other Activities		
28.	Translation Work, Responsible/Do	6	36
29.	Editing Work, Responsible/Do	16	27
30.	Printing Stationery & Lists, Responsible for	11	31
31-35	Others 1 - 5	0	39
	General Administration & Management		
36.	Planning	31	18
37.	Organising	36	16
38.	Staffing	13	30
39.	Directing	69	6
40.	Coordinating	25	22
41.	Controlling	18	25
42.	Representing	14	29
43.	Housing	18	25
	MEAN	32.56	
	STANDARD DEVIATION	28.76	

APPENDIX TABLE 12
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED IMPORTANCE SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	28	19
2.	Prepare Abstracts	1	39
3.	Others	5	32
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	27	20
5.	Ordering Books and Periodicals	50	11
6.	Procuring Books and Periodicals	41	13
7.	Maintaining Records	27	20
8.	Others	3	35
	Cataloguing & Classification		
9.	Books Classification	62	7
10.	Books Cataloguing	40	14
11.	Subject Headings	29	18
12.	Catalogue and Other Record Maintenance	33	17
13.	Classify / Catalogue Technical Reports	24	24
14.	Others	5	32
	Circulation / Lending		
15.	Circulate Holding /Requests	23	25
16.	Circulate ILL Material	21	27
17.	Route Periodicals on Request	26	23
18.	Others	0	40
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	27	20
20.	Binding of Documents, Supervise	22	26

Appendix Table 12 continued

21	Weeding Out-dated Publications	9	29
22	Others	3	35

Reference

23	Reference Service, Responsible for	106	2
24	Comp of Bibliographies, Responsible for	48	12
25	Instructions on Information Sources	93	5
26.	Reader's Orientation	40	14
27	Others	5	32

Other Activities

28.	Translation Work, Responsible/Do	6	31
29	Editing Work, Responsible/Do	17	28
30	Printing Stationery & Lists, Responsible for	2	38
31	Others 1	9	29
32.	Others 2	3	35
33 - 35	Others 3 - 5	0	40

General Administration & Management

36	Planning	94	4
37	Organising	96	3
38	Staffing	60	9
39	Directing	155	1
40	Coordinating	61	8
41	Controlling	63	6
42.	Representing	53	10
43	Housing	40	14

MEAN	33 88
STANDARD DEVIATION	34 51

APPENDIX TABLE 13
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO WEIGHTED IMPORTANCE SCORE
BY JOB-LEVEL : DEPUTY LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	24	10
2.	Prepare Abstracts	1	30
3.	Others	1	30
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	25	9
5.	Ordering Books and Periodicals	10	16
6.	Procuring Books and Periodicals	5	21
7.	Maintaining Records	0	34
8.	Others	8	20
	Cataloguing & Classification		
9	Books Classification	3	23
10	Books Cataloguing	3	23
11	Subject Headings	3	23
12	Catalogue and Other Record Maintenance	3	23
13	Classify / Catalogue Technical Reports	3	23
14	Others	0	34
	Circulation / Lending		
15.	Circulate Holding /Requests	1	30
16.	Circulate ILL Material	0	34
17.	Route Periodicals on Request	0	34
18.	Others	0	34
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	14	14
20.	Binding of Documents, Supervise	10	16

Appendix Table 13 Continued

21	Weeding Out-dated Publications	11	15
22.	Others	3	23
	Reference		
23	Reference Service Responsible for	23	11
24	Comp of Bibliographies, Responsible for	15	13
25	Instructions on Information Sources	17	12
26	Reader's Orientation	10	16
27	Others	5	21
	Other Activities		
28.	Translation Work, Responsible/Do	0	34
29	Editing Work, Responsible/Do	9	19
30	Printing Stationery & Lists Responsible for	1	30
31	Others 1	3	23
32-35	Others 2 - 5	0	34
	General Administration & Management		
36	Planning	71	1
37	Organising	56	3
38	Staffing	37	7
39	Directing	67	2
40	Coordinating	47	4
41	Controlling	34	8
42.	Representing	43	5
43	Housing	40	6
	MEAN	14 09	
	STANDARD DEVIATION	19 16	

APPENDIX TABLE 14
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE
FOR ALL RESPONDENTS

SL. NO.	NAME OF ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	276	19
2.	Prepare Abstracts	115	29
3.	Others	51	35
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	294	15
5.	Ordering Books and Periodicals	533	6
6.	Procuring Books and Periodicals	513	9
7.	Maintaining Records	289	16
8.	Others	73	31
	Cataloguing & Classification		
9.	Books Classification	629	4
10.	Books Cataloguing	519	8
11.	Subject Headings	230	24
12.	Catalogue and Other Record Maintenance	446	10
13.	Classify / Catalogue Technical Reports	284	18
14.	Others	24	39
	Circulation / Lending		
15.	Circulate Holding /Requests	239	23
16.	Circulate ILL Material	153	27
17.	Route Periodicals on Request	110	30
18.	Others	51	35
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	257	20

Appendix Table 14 Continued

20	Binding of Documents, Supervise	212	25
21	Weeding Out-dated Publications	132	28
22	Others	68	32

Reference

23	Reference Service, Responsible for	729	2
24	Comp of Bibliographies, Responsible for	379	12
25	Instructions on Information Sources	529	7
26.	Reader's Orientation	244	21
27	Others	55	34

Other Activities

28	Translation Work, Responsible/Do	2	38
29	Editing Work, Responsible/Do	168	26
30	Printing Stationery & Lists, Responsible for	56	33
31	Others 1	38	37
32.	Others 2	9	40
33 - 35	Others 3 - 5	0	41

General Administration & Management

36	Planning	673	3
37	Organising	592	5
38	Staffing	299	14
39	Directing	1097	1
40	Coordinating	434	11
41	Controlling	344	13
42.	Representing	286	17
43	Housing	244	21

MEAN	272	23
STANDARD DEVIATION	238	69

APPENDIX TABLE 15
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE
BY TYPE OF POSITION : ADMINISTRATORS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	182	20
2.	Prepare Abstracts	31	33
3.	Others	26	36
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	258	13
5.	Ordering Books and Periodicals	311	9
6.	Procuring Books and Periodicals	256	14
7.	Maintaining Records	162	21
8.	Others	33	31
	Cataloguing & Classification		
9.	Books Classification	338	7
10.	Books Cataloguing	223	17
11.	Subject Headings	132	24
12.	Catalogue and Other Record Maintenance	183	19
13.	Classify / Catalogue Technical Reports	140	22
14.	Others	15	38
	Circulation / Lending		
15.	Circulate Holding /Requests	123	26
16.	Circulate ILL Material	62	28
17.	Route Periodicals on Request	43	29
18.	Others	0	40
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	224	16

Appendix Table 15 Continued

20	Binding of Documents, Supervise	130	25
21	Weeding Out-dated Publications	82	27
22	Others	18	37

Reference

23	Reference Service, Responsible for	589	4
24	Comp of Bibliographies, Responsible for	306	10
25	Instructions on Information Sources	377	6
26.	Reader's Orientation	198	18
27	Others	40	30

Other Activities

28	Translation Work, Responsible/Do	31	33
29	Editing Work, Responsible/Do	140	22
30	Printing Stationery & Lists, Responsible for	32	32
31	Others 1	29	35
32	Others 2	9	39
33-35	Others 3 - 5	0	40

General Administration & Management

36	Planning	672	2
37	Organising	591	3
38.	Staffing	299	11
39	Directing	1040	1
40	Coordinating	431	5
41	Controlling	329	8
42.	Representing	285	12
43	Housing	235	15

	MEAN	199 88	
	STANDARD DEVIATION	215 30	

APPENDIX TABLE 16
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE
BY TYPE OF POSITION : NON-ADMINISTRATORS ···

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	94	12
2.	Prepare Abstracts	84	14
3.	Others	25	27
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	36	24
5.	Ordering Books and Periodicals	222	5
6.	Procuring Books and Periodicals	257	4
7.	Maintaining Records	127	9
8.	Others	40	23
	Cataloguing & Classification		
9.	Books Classification	291	2
10.	Books Cataloguing	296	1
11.	Subject Headings	98	11
12.	Catalogue and Other Record Maintenance	263	3
13.	Classify / Catalogue Technical Reports	144	7
14.	Others	9	31
	Circulation / Lending		
15.	Circulate Holding /Requests	116	10
16.	Circulate ILL Material	91	13
17.	Route Periodicals on Request	67	17
18.	Others	51	20
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	33	25
20.	Binding of Documents, Supervise	82	15

Appendix Table 16   Continued

21	Weeding Out-dated Publications	50	21
22.	Others	50	21
	Reference		
23	Reference Service, Responsible for	140	8
24	Comp of Bibliographies, Responsible for	73	16
25	Instructions on Information Sources	152	6
26.	Reader's Orientation	56	19
27	Others	15	29
	Other Activities		
28.	Translation Work, Responsible/Do	1	35
29	Editing Work, Responsible/Do	28	26
30	Printing Stationery & Lists, Responsible for	24	28
31	Others 1	9	31
32 - 35	Others 2 - 5	0	39
	General Administration & Management		
36	Planning	1	35
37	Organising	1	35
38.	Staffing	0	39
39	Directing	57	18
40	Coordinating	3	34
41	Controlling	15	29
42.	Representing	1	35
43	Housing	9	31
	MEAN	72 35	
	STANDARD DEVIATION	83 91	

APPENDIX TABLE 17
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE
BY JOB-LEVEL : PROFESSIONAL ASSISTANTS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	147	12
2.	Prepare Abstracts	88	21
3.	Others	25	34
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	114	16
5.	Ordering Books and Periodicals	307	5
6.	Procuring Books and Periodicals	343	3
7.	Maintaining Records	188	9
8.	Others	40	33
	Cataloguing & Classification		
9.	Books Classification	410	1
10.	Books Cataloguing	358	2
11	Subject Headings	108	17
12.	Catalogue and Other Record Maintenance	326	4
13.	Classify / Catalogue Technical Reports	175	10
14.	Others	9	37
	Circulation / Lending		
15.	Circulate Holding /Requests	157	11
16.	Circulate ILL Material	100	19
17.	Route Periodicals on Request	82	23
18.	Others	51	29
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	136	15
20.	Binding of Documents, Supervise	144	13

Appendix Table 17   Continued

21	Weeding Out-dated Publications	61	25
22.	Others	50	30
	Reference		
23	Reference Service, Responsible for	258	6
24	Comp of Bibliographies, Responsible for	142	14
25	Instructions on Information Sources	231	8
26.	Reader's Orientation	84	22
27	Others	15	35
	Other Activities		
28	Translation Work, Responsible/Do	6	38
29	Editing Work, Responsible/Do	62	26
30	Printing Stationery & Lists, Responsible for	49	31
31-35	Others 1 - 5	0	39
	General Administration & Management		
36	Planning	94	20
37	Organising	104	18
38.	Staffing	13	36
39	Directing	249	7
40	Coordinating	73	24
41	Controlling	56	27
42.	Representing	54	28
43	Housing	42	32
	MEAN	115 21	
	STANDARD DEVIATION	109 68	

APPENDIX TABLE 18
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCE WEIGHTED SCORE
BY JOB-LEVEL : ASSISTANT LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	70	25
2.	Prepare Abstracts	1	39
3.	Others	25	31
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	85	21
5.	Ordering Books and Periodicals	186	8
6.	Procuring Books and Periodicals	145	13
7.	Maintaining Records	101	18
8.	Others	15	32
	Cataloguing & Classification		
9.	Books Classification	216	6
10.	Books Cataloguing	158	11
11.	Subject Headings	113	17
12.	Catalogue and Other Record Maintenance	117	16
13.	Classify / Catalogue Technical Reports	100	19
14.	Others	15	32
	Circulation / Lending		
15.	Circulate Holding /Requests	81	22
16.	Circulate ILL Material	53	26
17.	Route Periodicals on Request	28	29
18.	Others	0	40
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	75	24
20.	Binding of Documents, Supervise	46	27

Appendix Table 18   Continued

21	Weeding Out-dated Publications	15	32
22	Others	9	36
	Reference		
23	Reference Service, Responsible for	400	2
24	Comp of Bibliographies, Responsible for	210	7
25	Instructions on Information Sources	265	5
26	Reader's Orientation	138	14
27	Others	15	32
	Other Activities		
28	Translation Work, Responsible/Do	26	30
29	Editing Work, Responsible/Do	77	23
30	Printing Stationery & Lists, Responsible for	6	38
31	Others 1	35	28
32	Others 2	9	36
33-35	Others 3 - 5	0	40
	General Administration & Management		
36	Planning	324	4
37	Organising	331	3
38	Staffing	166	10
39	Directing	581	1
40	Coordinating	173	9
41	Controlling	147	12
42	Representing	127	15
43	Housing	96	20
	MEAN	111	16
	STANDARD DEVIATION	122	67

APPENDIX TABLE 19
JOB-ACTIVITY ITEMS RANKING
ACCORDING TO JOINT TIME-IMPORTANCEWEIGHTED SCORE
BY JOB-LEVEL : DEPUTY LIBRARIANS

SL. NO.	NAME OF THE JOB-ACTIVITY	WEIGHTED TIME-IMPORTANCE SCORE	RANK
	Indexing & Abstracting		
1.	Scan Literature	59	11
2.	Prepare Abstracts	26	18
3.	Others	1	31
	Selection & Acquisition		
4.	Selection of Materials, Responsible for	95	9
5.	Ordering Books and Periodicals	40	14
6.	Procuring Books and Periodicals	25	19
7.	Maintaining Records	0	34
8.	Others	18	23
	Cataloguing & Classification		
9.	Books Classification	3	27
10.	Books Cataloguing	3	27
11.	Subject Headings	9	24
12.	Catalogue and Other Record Maintenance	3	27
13.	Classify / Catalogue Technical Reports	9	24
14.	Others	0	34
	Circulation / Lending		
15.	Circulate Holding /Requests	1	31
16.	Circulate ILL Material	0	34
17.	Route Periodicals on Request	0	34
18.	Others	0	34
	Maintenance of Holdings		
19.	Stock Preservation, Responsible for	46	13
20.	Binding of Documents, Supervise	22	21

Appendix Table 19   Continued

21	Weeding Out-dated Publications	53	12
22.	Others	9	24
	Reference		
23	Reference Service, Responsible for	71	10
24	Comp of Bibliographies, Responsible for	27	17
25	Instructions on Information Sources	33	15
26	Reader's Orientation	22	21
27	Others	25	19
	Other Activities		
28	Translation Work, Responsible/Do	0	31
29	Editing Work, Responsible/Do	29	16
30	Printing Stationery & Lists, Responsible for	1	31
31	Others 1	3	27
32-35	Others 2 - 5	0	31
	General Administration & Management		
36	Planning	255	2
37	Organising	157	4
38.	Staffing	120	6
39	Directing	267	1
40	Coordinating	188	3
41	Controlling	141	5
42	Representing	105	8
43	Housing	106	7
	MEAN	45 86	
	STANDARD DEVIATION	67 72	

JOB-DIMENSIONS AND ACADEMIC NEEDS OF PROFESSIONAL LIBRARIANS IN UNIVERSITY

THE QUESTIONNAIRE

PART I - EVALUATING JOB-ACTIVITIES YOU PERFORM IN RELATION TO TIME AND IMPORTANCE

DIRECTIONS FOR COMPLETION OF PART I OF THE QUESTIONNAIRE

On the following pages you will find a number of statements about job-activities which might apply to your position. May I request you to rate each in terms of how time consuming and important it is as compared to other activities.

First, decide whether the statement applies to your position. Base this decision on actually what you do. If the statement is not applicable to your position, leave the columns under Time and Importance blank.

If the statement is applicable to your position, indicate in TIME column how time-consuming this activity is as COMPARED TO OTHER ACTIVITIES in your entire job.

- ●   One that consumes 25% or more of your time
- ○   Consumes 10% to 25% of your time
- ○   Consumes less than 10% of your time

Then assess how important the activity is as COMPARED TO OTHER ACTIVITIES (in terms of its contribution to effective performance of your job.) Indicate it by checking (✓) the relevant symbol in the IMPORTANCE column. The symbols and their meaning are

⬤   One of the most important parts of the position.

☺   A substantial part of the position.

◯   One of the least important parts of the position.

Please Note :

In part I, please check (✓ only those positions/activities which you directly and actually perform yourself.

If the statement describes something that is :

1.   delegated by you to a subordinate; or,

2.   is strictly the concern of a superior, it is not a part of your position. Please leave the boxes that pertain to it blank.

A   SPECIALISED LIBRARY FUNCTIONS

In this section, you need to reply only those parts of the questionnaire that apply to your job. Then skip to Section B

TIME				IMPORTANCE		JOB-ACTIVITIES
●	◗	○	●	◔	○	**In Indexing & Abstracting, I:**
( )	( )	( )	( )	( )	( )	1 Scan literature.
( )	( )	( )	( )	( )	( )	2 Prepare abstracts
( )	( )	( )	( )	( )	( )	3 Others _____
						In Selection & Acquisition, I:
( )	( )	( )	( )	( )	( )	4. Am overall responsible for selection of material
( )	( )	( )	( )	( )	( )	5 Order & check books and periodicals etc
( )	( )	( )	( )	( )	( )	6 Procure books and periodicals etc
( )	( )	( )	( )	( )	( )	7 Maintain financial & other records
( )	( )	( )	( )	( )	( )	8 Others _____
						In Cataloguing & Classification, I:
( )	( )	( )	( )	( )	( )	9. Classify and/or reclassify books etc
( )	( )	( )	( )	( )	( )	10 Catalogue books etc
( )	( )	( )	( )	( )	( )	11. Maintain & develop the lists of subject-headings
( )	( )	( )	( )	( )	( )	12 Maintain catalogues & other records
( )	( )	( )	( )	( )	( )	13. Classify and/or catalogue public-documents and technical reports
( )	( )	( )	( )	( )	( )	14 Others :_____

TIME			IMPORTANCE				JOB-ACTIVITIES
●	◉	○	●	◉	○		**In Circulation/Lending, I:**
( )	( )	( )	( )	( )	( )	15.	Circulate holdings on request.
( )	( )	( )	( )	( )	( )	16.	Circulate inter-library-loan materials.
( )	( )	( )	( )	( )	( )	17.	Route periodicals on request.
( )	( )	( )	( )	( )	( )	18.	Others : ———————————
							In Maintenance of Holdings, I :
( )	( )	( )	( )	( )	( )	19.	Am responsible for preservation of stock.
( )	( )	( )	( )	( )	( )	20.	Supervise binding of documents.
( )	( )	( )	( )	( )	( )	21.	Weed out-of-date material.
( )	( )	( )	( )	( )	( )	22.	Others :———————————
							In Reference, I :
( )	( )	( )	( )	( )	( )	23.	Am responsible for the reference information services provided.
( )	( )	( )	( )	( )	( )	24.	Am responsible and/or compile bibliographies, reading lists, etc.
( )	( )	( )	( )	( )	( )	25.	Instruct readers in reference methods and Information sources.
( )	( )	( )	( )	( )	( )	26.	Plan and/or conduct orientation programmes for readers.
( )	( )	( )	( )	( )	( )	27.	Others:———————————
							Other activities; I:
( )	( )	( )	( )	( )	( )	28.	Am responsible and/or do translation work.
( )	( )	( )	( )	( )	( )	29.	Am responsible and/or do editing work.
( )	( )	( )	( )	( )	( )	30.	Am responsible for printing various lists, stationery, etc.
( )	( )	( )	( )	( )	( )	31.	Others :———————————
( )	( )	( )	( )	( )	( )	32.	
( )	( )	( )	( )	( )	( )	33.	
( )	( )	( )	( )	( )	( )	34.	
( )	( )	( )	( )	( )	( )	35.	

Here are various functions you perform in your job as related to your area of responsibility, whether it be for a whole library, a branch, department or division, or the specialised library function assigned to you

TIME			IMPORTANCE			JOB-ACTIVITIES
●	○	○	●	○	○	
( )	( )	( )	( )	( )	( )	36 *PLANNING* i e dealing with goals & objectives, costing of library activities, budgets policies, implementation of policies, etc
( )	( )	( )	( )	( )	( )	37 *ORGANISING* i e dealing with grouping of various activities allocation of staff, line and staff relations, maintenance of organisation charts and staff manuals, etc
( )	( )	( )	( )	( )	( )	38 *STAFFING* i e dealing with personnel policies & procedures, forecast staffing-needs, selection of personnel, training, performance appraisals, etc
( )	( )	( )	( )	( )	( )	39 *DIRECTING* i e dealing with supervision of subordinates, job-assignments, checking work of subordinates, decision-making, administering discipline, communication, etc
( )	( )	( )	( )	( )	( )	40 *COORDINATING* i e dealing with coordination of activities of various groups, informal contacts, holding group meetings, anticipation of problems, etc

TIME IMPORTANCE	JOB-ACTIVITIES

● ☺ ○ ● ☺ ○

( ) ( ) ( ) ( ) ( ) ( )	41. *CONTROLLING* i.e. dealing with library standards, scheduling and phasing activities, measurement of performance, progress-reports, etc.
( ) ( ) ( ) ( ) ( ) ( )	42. REPRESENTING i.e. dealing with issue of news releases, writing articles, work with contractors and consultants, participation in meetings, conferences, etc.
( ) ( ) ( ) ( ) ( ) ( )	43. *HOUSING* i.e. dealing with planning of library buildings, use of library space, physical maintenance of library, equipment housing, etc.

PART II —   YOUR ACADEMIC NEEDS

1. To upgrade and update your present knowledge, would you feel interested in undertaking some training in different areas of librarianship?   1. ( ) Yes; 2. ( ) No.

   If yes. Would you like to undertake :
   Workshops/seminars (i.e. few days to four weeks programme)

   or, Regular courses/intensive short-term courses.

   Please indicate area/areas of your interest in studying : (e.g. Personnel administration, current awareness services, etc.)

   1. _____

   2. _____

2   Would you enroll for a course in some other subject-area ?
     1   ( )   Yes, 2   ( )   No

     If Yes, what area or discipline ?

3   In what other ways, in addition to workshops, seminars and courses, do
     you feel that the library-schools could help you in your professional
     development ? (Add separate sheet if required)

     _____

     _____

PART III—   SOME INFORMATION ABOUT YOURSELF AND
                 YOUR CAREER

A.   YOUR PRESENT JOB:

1   What is the title of your present position ?

2   Do you have any administrative/supervisory responsibilities
     1   ( )   Yes, 2   ( )   No
     If yes, Please indicate so by checking one box in section a or b

a   ADMINISTRATIVE

     1 ( ) Head of Library,   2 ( ) Assistant or Associate Head,
     3 ( ) Head of Deptt or   4 ( ) Head of Branch and,
            Division
     5 ( ) Others _____

OR b 6 ( ) SUPERVISORY i e responsibility for supervising a number of
              professional and/or technical positions, but not overall progra-
              mme responsibility

3   In which of the following types of library-activities are you primarily
     engaged ?

     7   ( )   Cataloguing &   8   ( )   Circulation
                classification

     9   ( )   Indexing &   10   ( )   Non-print material
                abstracting

11. ( ) Periodicals   12. ( ) Personnel

13. ( ) Public relations

14. ( ) Reference/Bibliography/Reader's services.

15. ( ) Selection &   16. ( ) Systems analysis
          acquisition

17. ( ) Translation   18. ( ) Others: _____

4.   Are you involved in applying electronic data processing procedures

          1. ( ) Yes;   2. ( ) No.

     If Yes, Please indicate :

     1.   The level of your involvement ————————————————

     ————————————————————————————————————

     2.   The library activity (e.g. cataloguing) ————————————

     ————————————————————————————————————

5.   Approximately what is the total no. of people (including professional
     and non-professional) employed in your library at this location where
     you work :————————————————————————————————

6. How well does your job utilise your talents ?

          1. ( ) To full capacity;   2. ( ) Very well;
          3. ( ) Fairly well;   4. ( ) Very little;
          5. ( ) Not at all.

B. YOUR EDUCATION :

     To give a picture of your educational background, please complete the
     table below :

STUDY PROGRAMMES	Title of Degree	Year Completed	Programme	Area of Specialisation

7. ( ) Bachelor's in Lib.Sc.
8. ( ) Master's in Lib.Sc.

9 ( ) Doctorate in Lib Sc
10 ( ) Bachelor's in other subject
11 ( ) Master's in other subject
12 ( ) Doctorate in other subject
13 ( ) Other courses (please specify)

14 Would you enroll in any advanced course in librarianship i e MLISc/
   M.Phil./Ph D ?

   1 ( ) Yes   2 ( ) No

15 Are there any formal scientific, technical or professional courses you
   lack which would have been specially helpful in your position

   1 ( ) Yes,   2 ( ) No

   If yes please specify course or course areas (e g Statistics operation
   research, etc.)

16 In relation to your present position, are there any *activities* for which
   your training has not prepared you ?

   1 ( ) Yes,   2 ( ) No

   If yes please specify these activities, (e g Indexing techniques; Binding
   routines, etc)

C. YOUR EXPERIENCE

1 How many years of professional experience do you have ?

   Years ——————— Months ———————

2 Do you have any experience in an occupation other than librarianship ?
   1 ( ) Yes,   2 ( ) No

   If yes which occupation or profession you served most ?

3.   Which of the activities do you feel you perform with the greatest
      competence ?

      _____

      _____

      Please indicate why you feel you have achieved this competence :

      because _____

      _____

      _____

4.   Which of the activities do you feel you perform with the least
      competence ?

      _____

      _____

      Please indicate why you feel you have achieved little competence in
      the areas :

      Because _____

      _____

      _____

5.   During your library service did you attend any course (s) in Lib. Sc., or
      other subject areas.

      1. ( ) Yes;   2. ( ) No.

      If yes, please specify the course (or attach a list of courses).

      _____

      _____

D.   PERSONAL INFORMATION:

      1. Are you : ( ) Male;   ( ) Female   2. Your age :—————

PART IV —   YOUR IDEAS AND COMMENTS

1   YOUR COMMENTS ON JOB ACTIVITIES   (e g part I of the
      questionnaire)

2   YOUR SUGGESTIONS FOR COURSES AND CURRICULA

3   YOUR SUGGESTIONS ABOUT THIS STUDY

This is the end   Thank you very much

(PAWAN K GUPTA)
Deputy Librarian
Rajasthan University Library

3.   Which of the activities do you feel you perform with the greatest competence ?

_____

_____

Please indicate why you feel you have achieved this competence :

because _____

_____

_____

4.   Which of the activities do you feel you perform with the least competence ?

_____

_____

Please indicate why you feel you have achieved little competence in the areas :

Because _____

_____

_____

5.   During your library service did you attend any course (s) in Lib. Sc., or other subject areas.

1. ( ) Yes;   2. ( ) No.

If yes, please specify the course (or attach a list of courses).

_____

_____

D.   PERSONAL INFORMATION:

1. Are you : ( ) Male;   ( ) Female   2. Your age :————

PART IV —   YOUR IDEAS AND COMMENTS

1   YOUR COMMENTS ON JOB ACTIVITIES   (e g part I of the
     questionnaire)

2.   YOUR SUGGESTIONS FOR COURSES AND CURRICULA

3   YOUR SUGGESTIONS ABOUT THIS STUDY

This is the end   Thank you very much

(PAWAN K GUPTA)
Deputy Librarian
Rajasthan University Library